Navigating from Eminence-Based to Evidence-Based Decision-Making

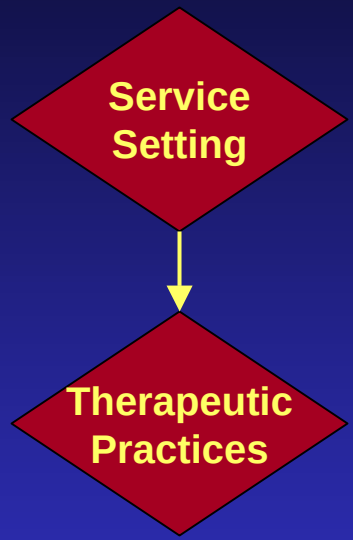
Eric L. Daleiden

Bruce F. Chorpita

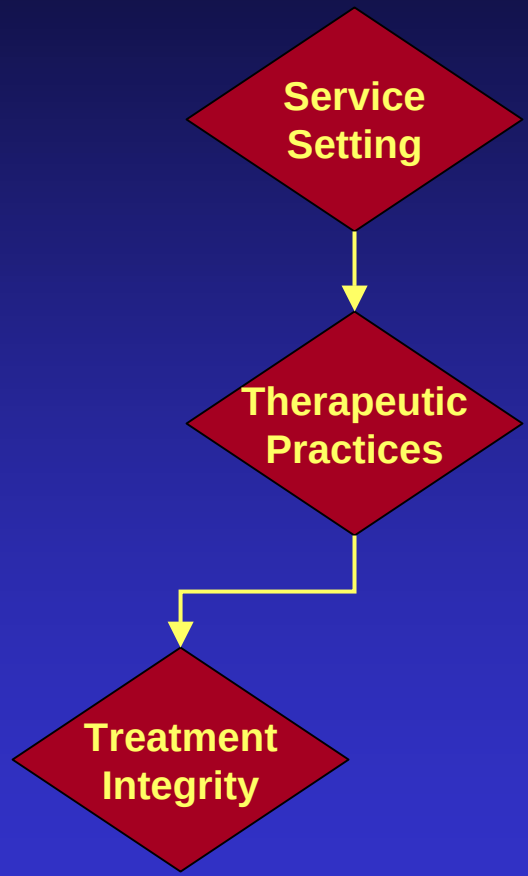
Reading the Seas

Where should we treat the client?

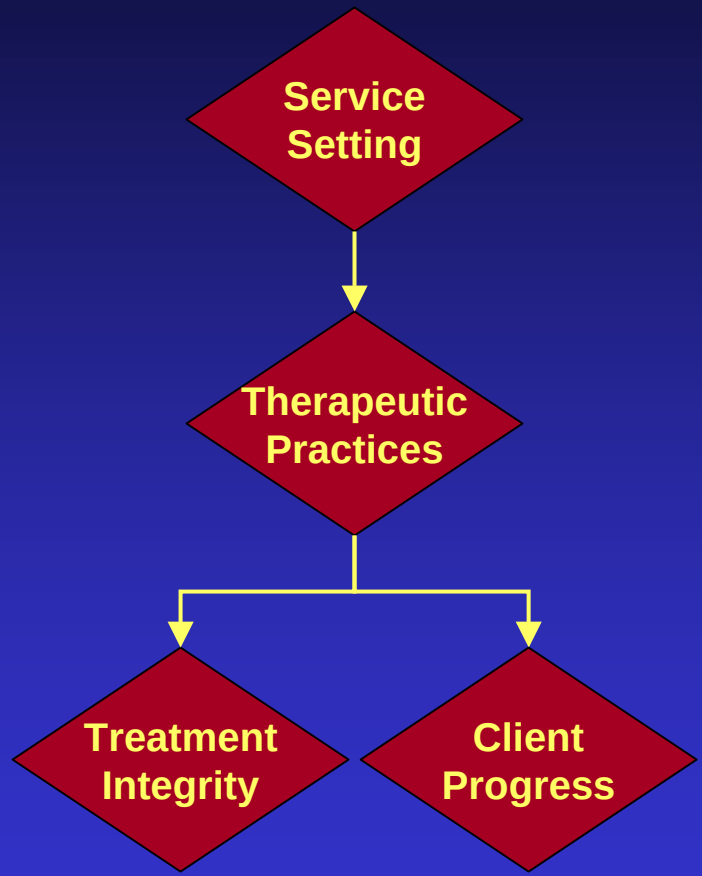
How should we treat the client?



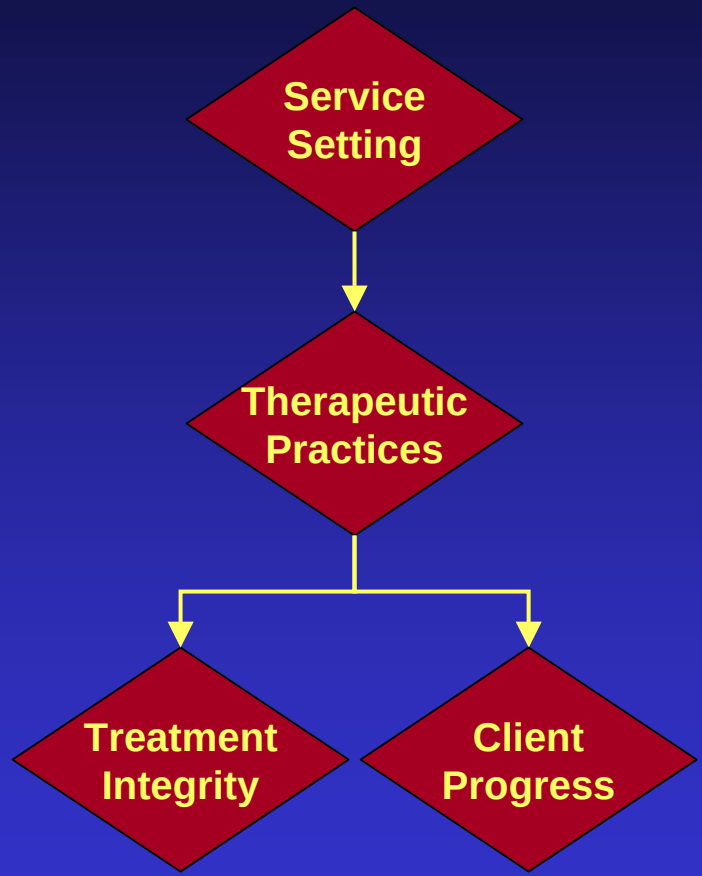
Are we providing quality service to the client?



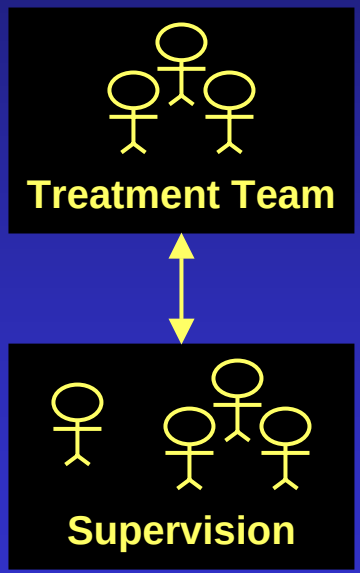
Is the client getting better?

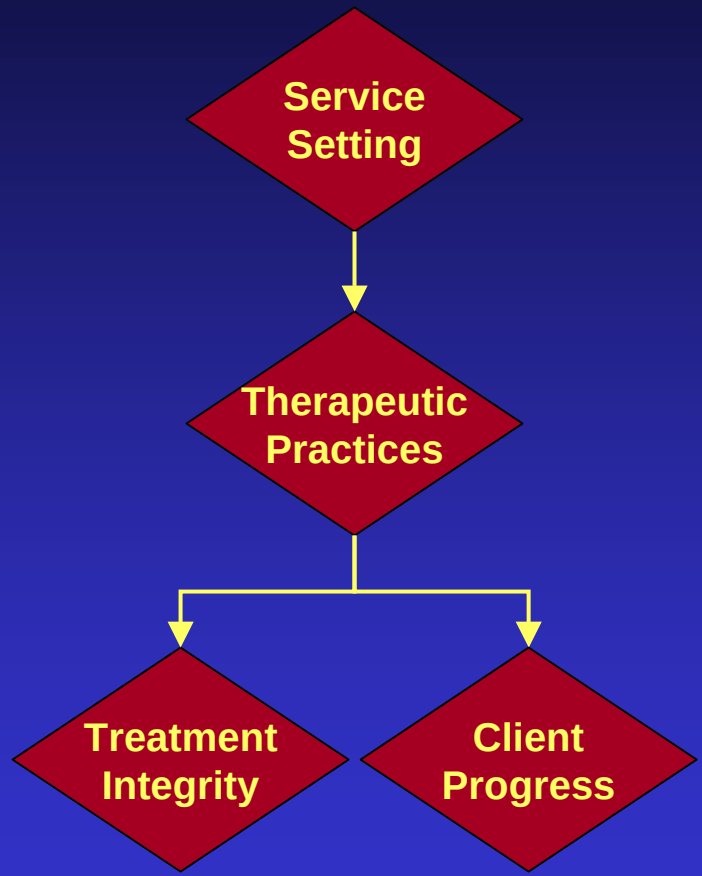


Who should treat the client?

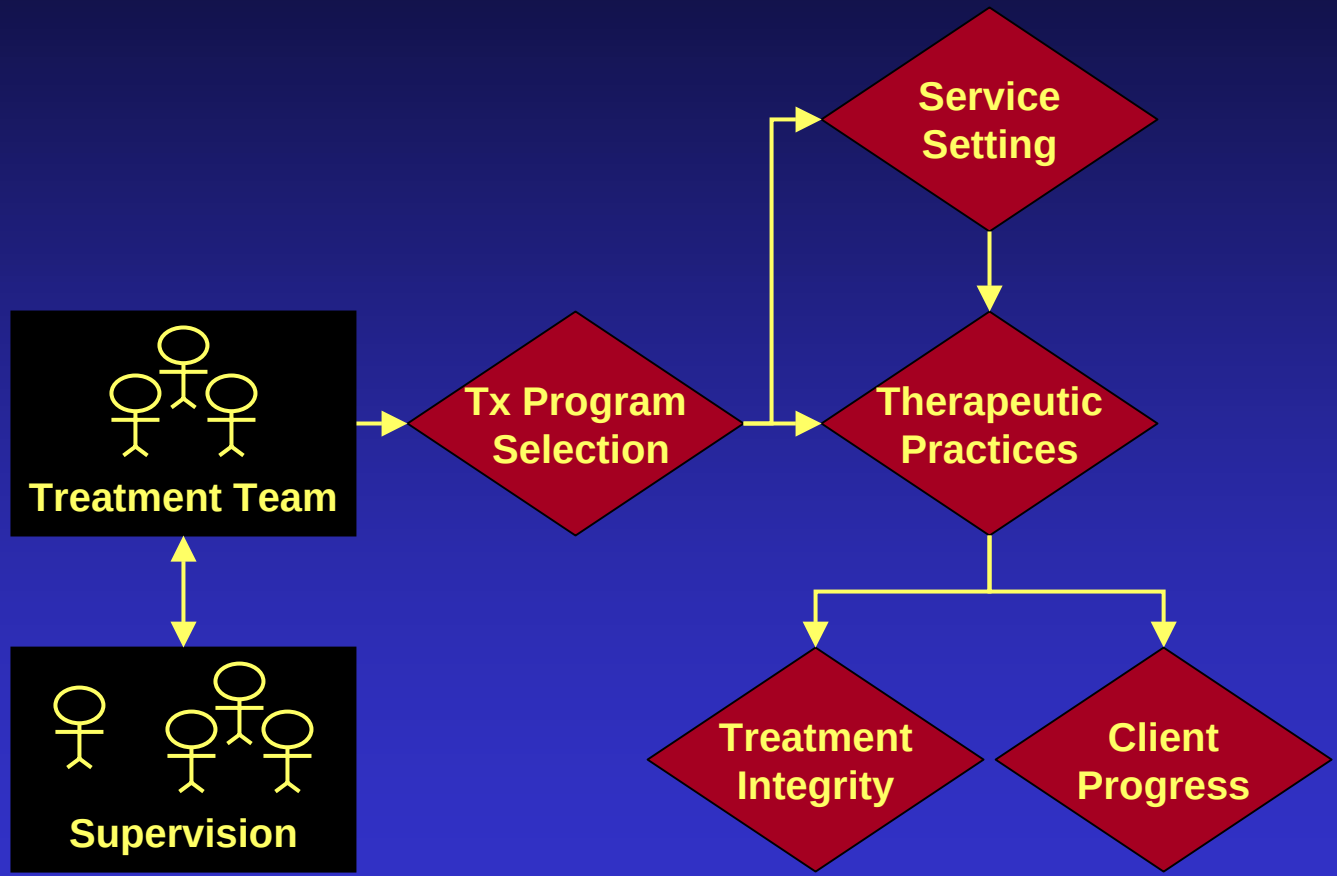


How should we manage the treatment?

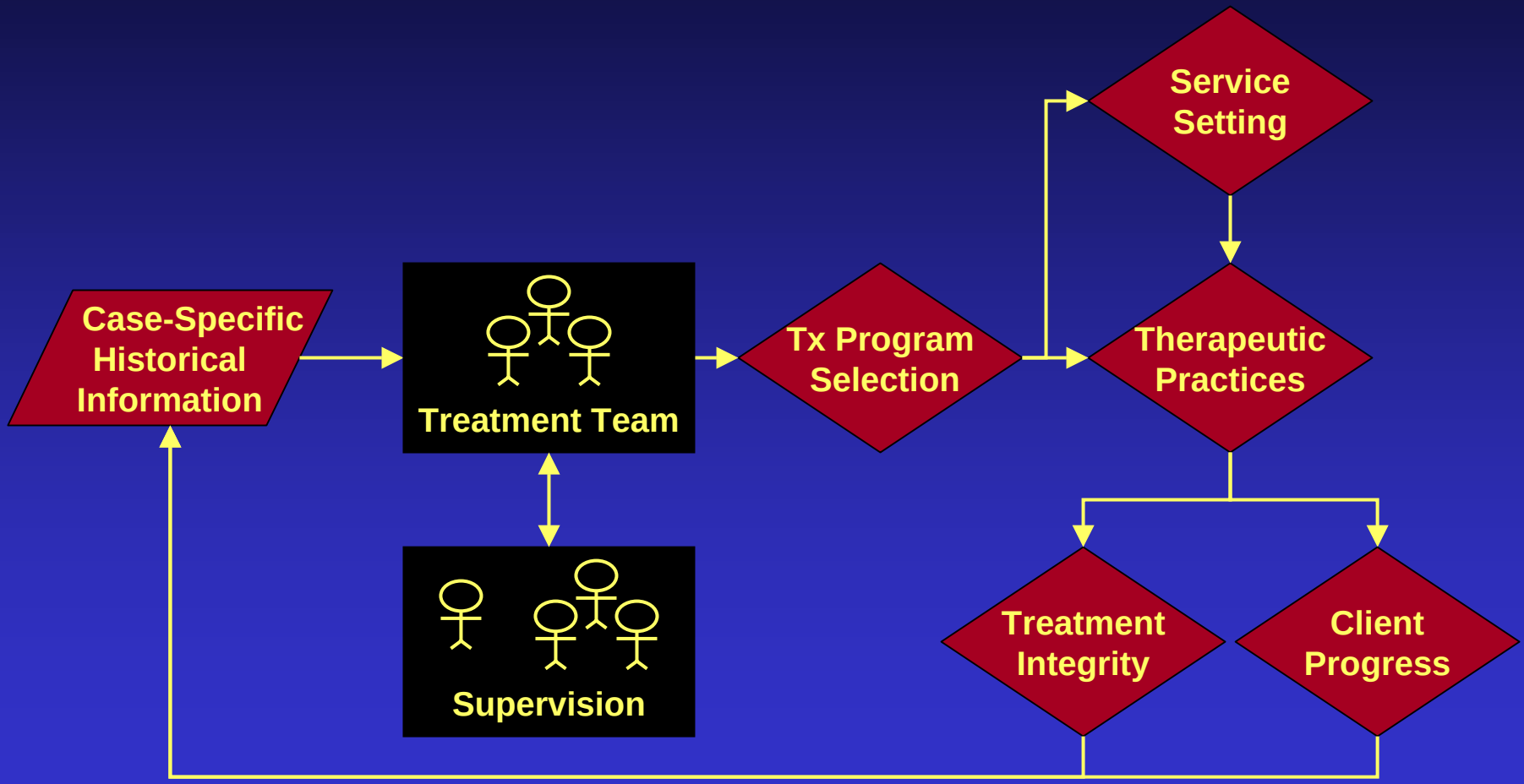




Which treatment program(s) should we select?



What are our sources of evidence?



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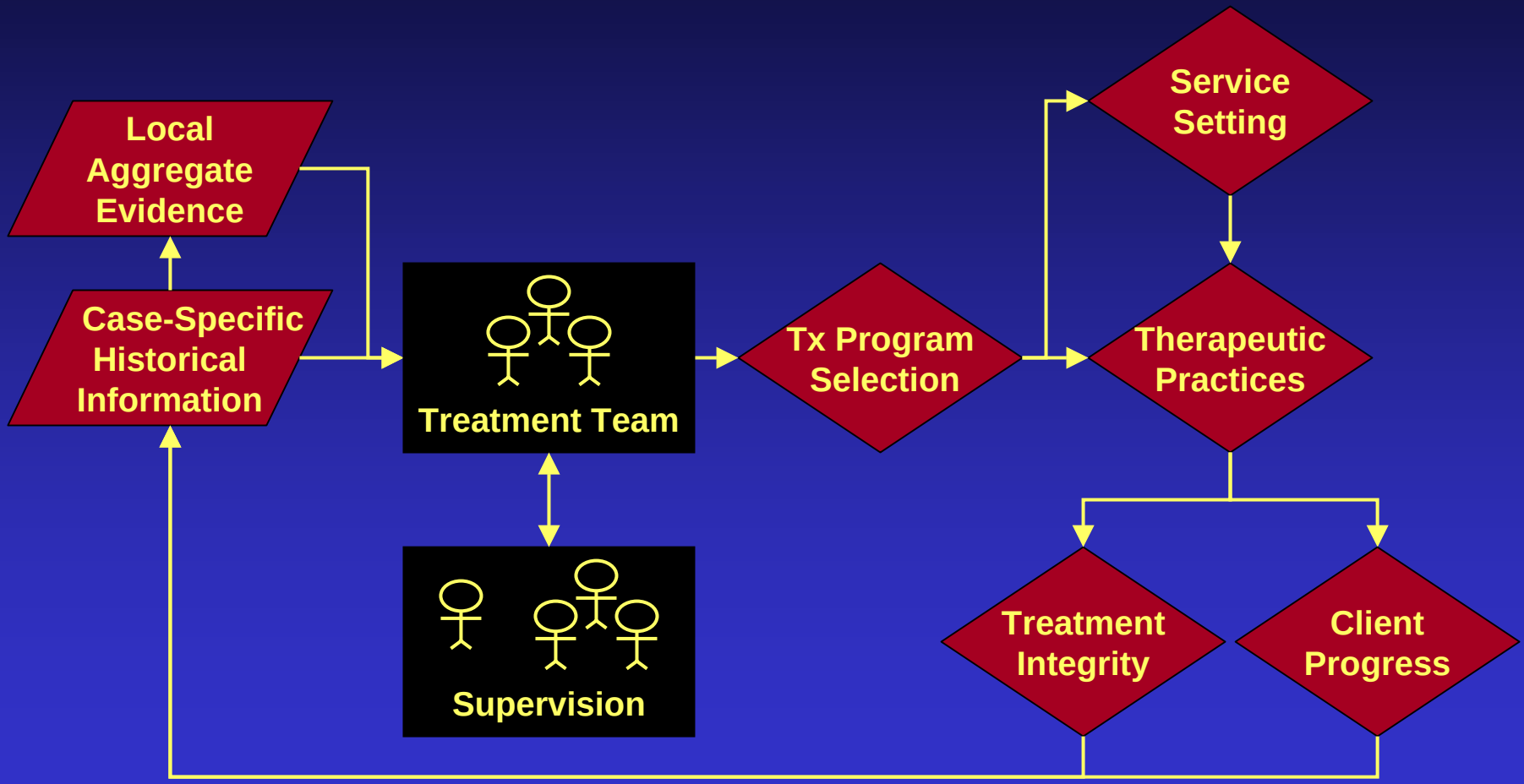

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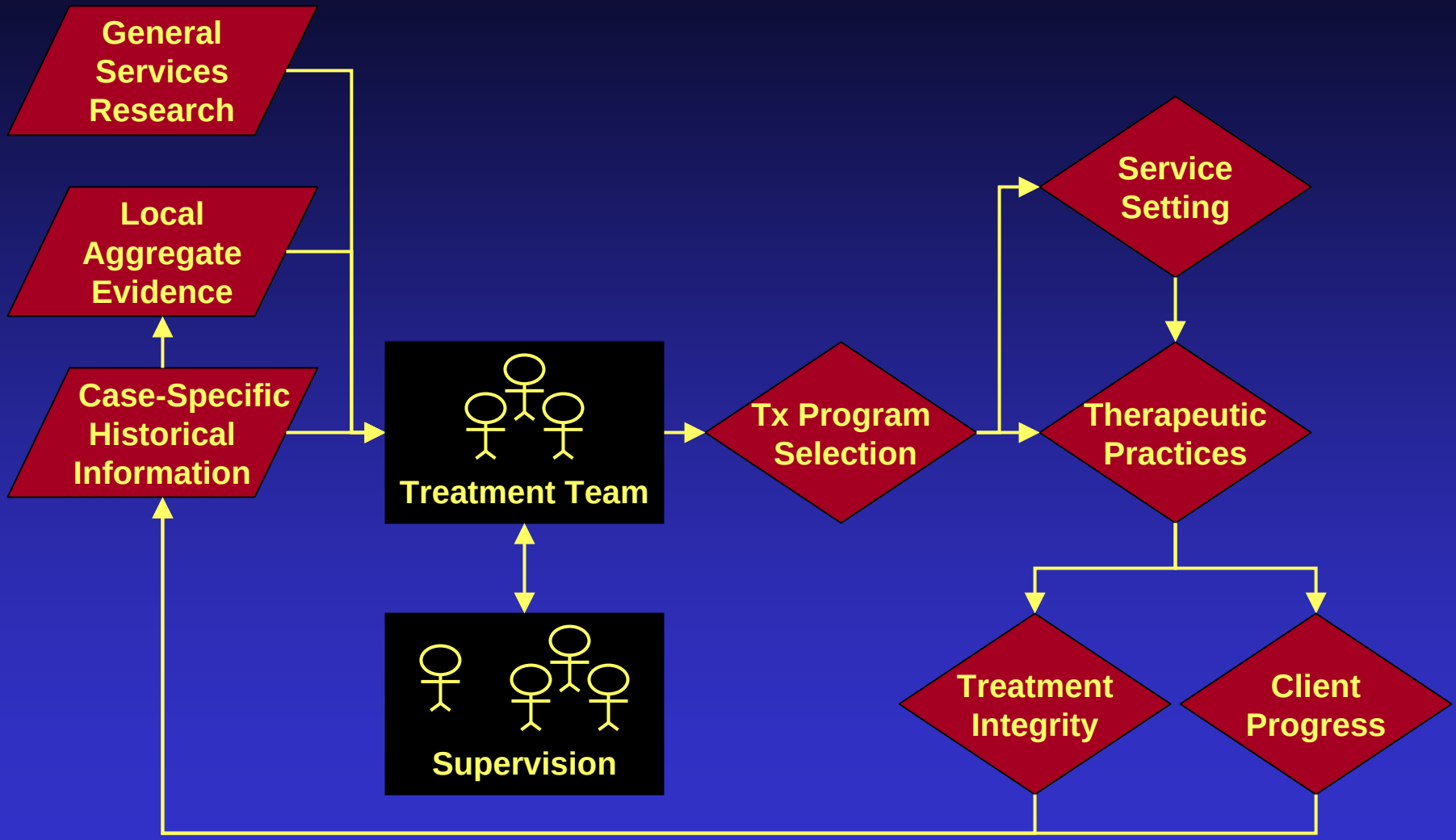

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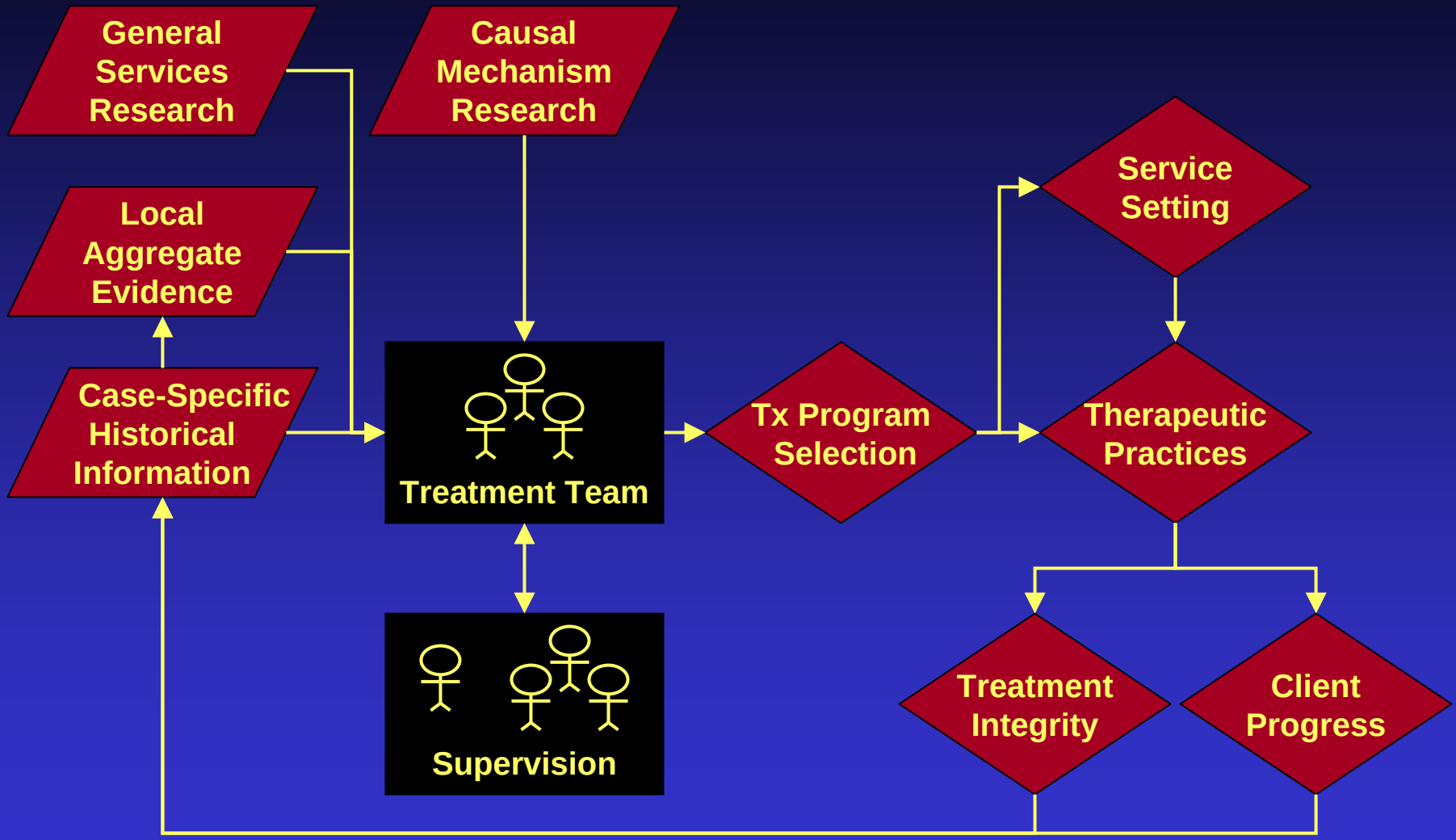


Reading the Winds

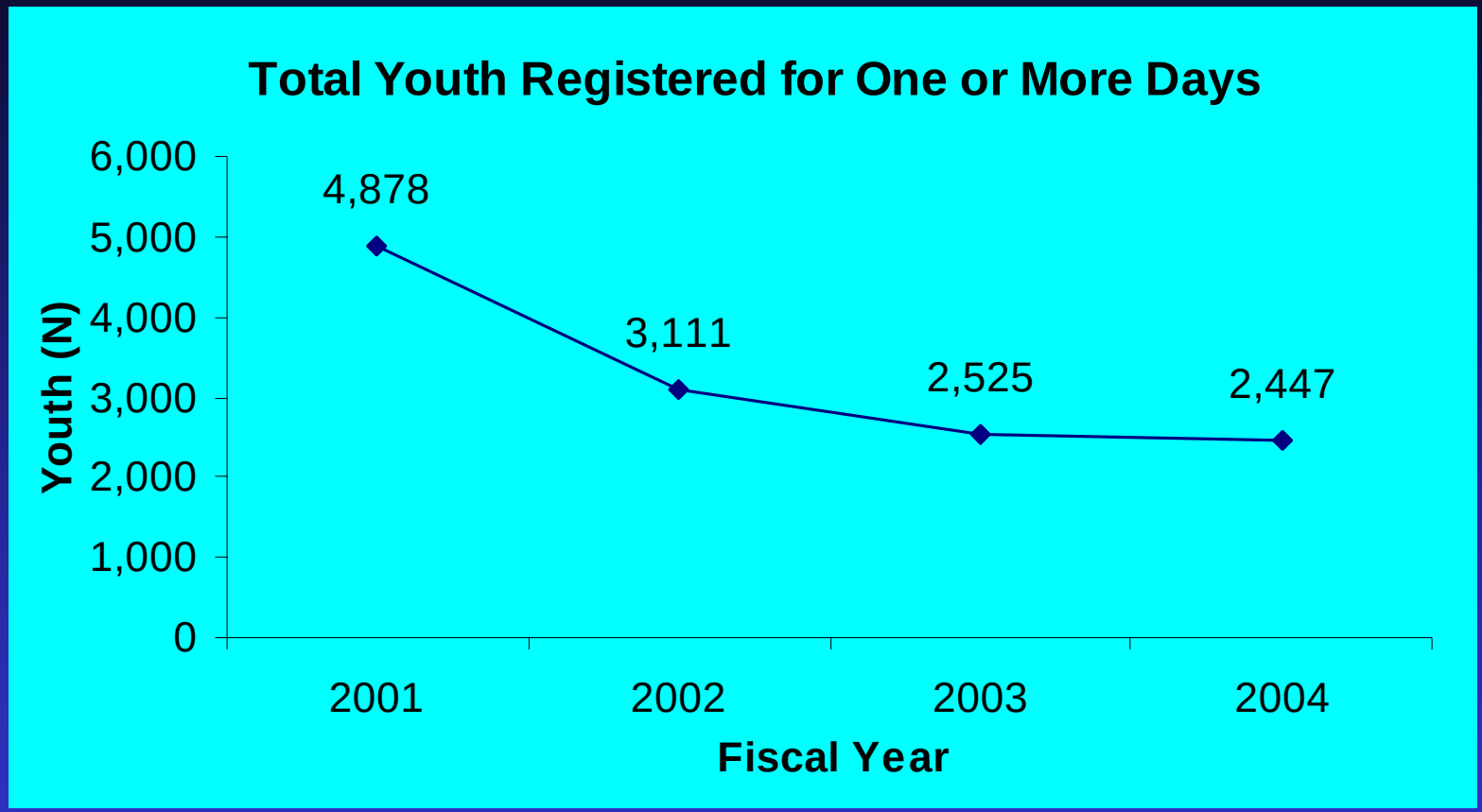
The Winds of Change

1. Who Registered?
2. How Served?
3. What Results?

Who Registered?

1. How many?
2. Where were they served?
3. What was their gender?
4. What was their race or ethnicity?
5. What were their problems?

How many?

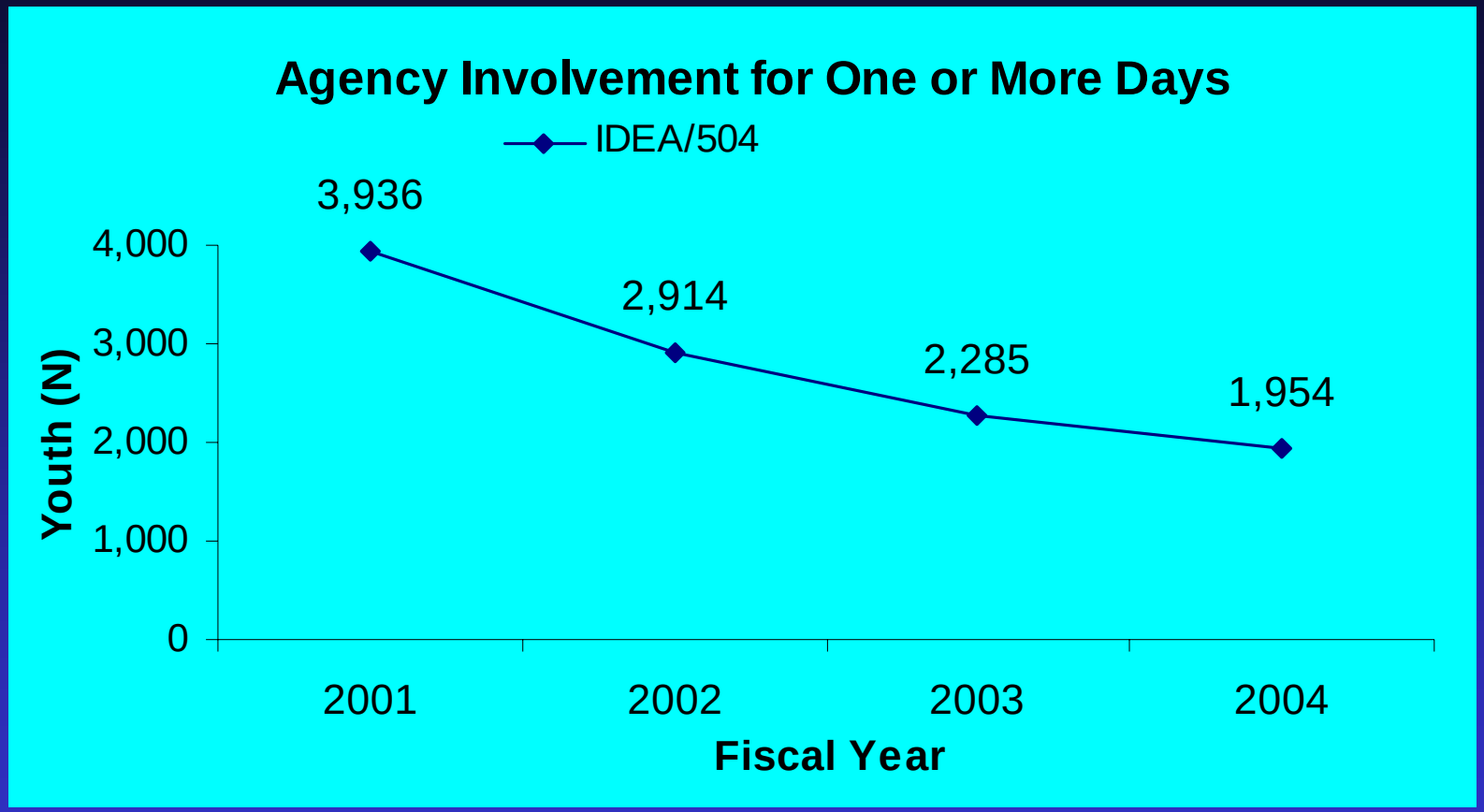


⇩ 3% Decrease from 2003

Excluding DOE transfers &

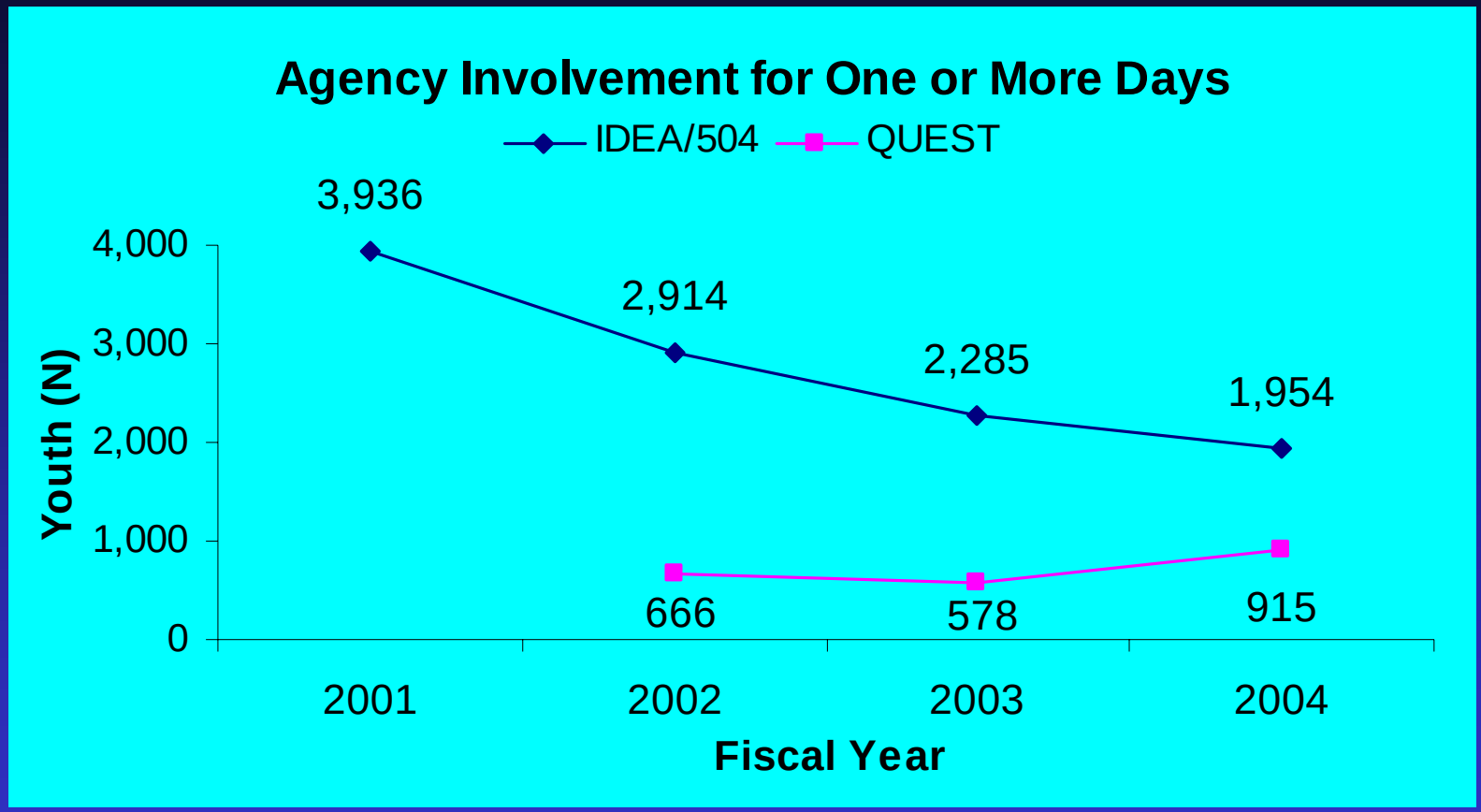
Pervasive Developmental Disorder prior to 2004

How many? Education



Education: 14% Decrease ⇩

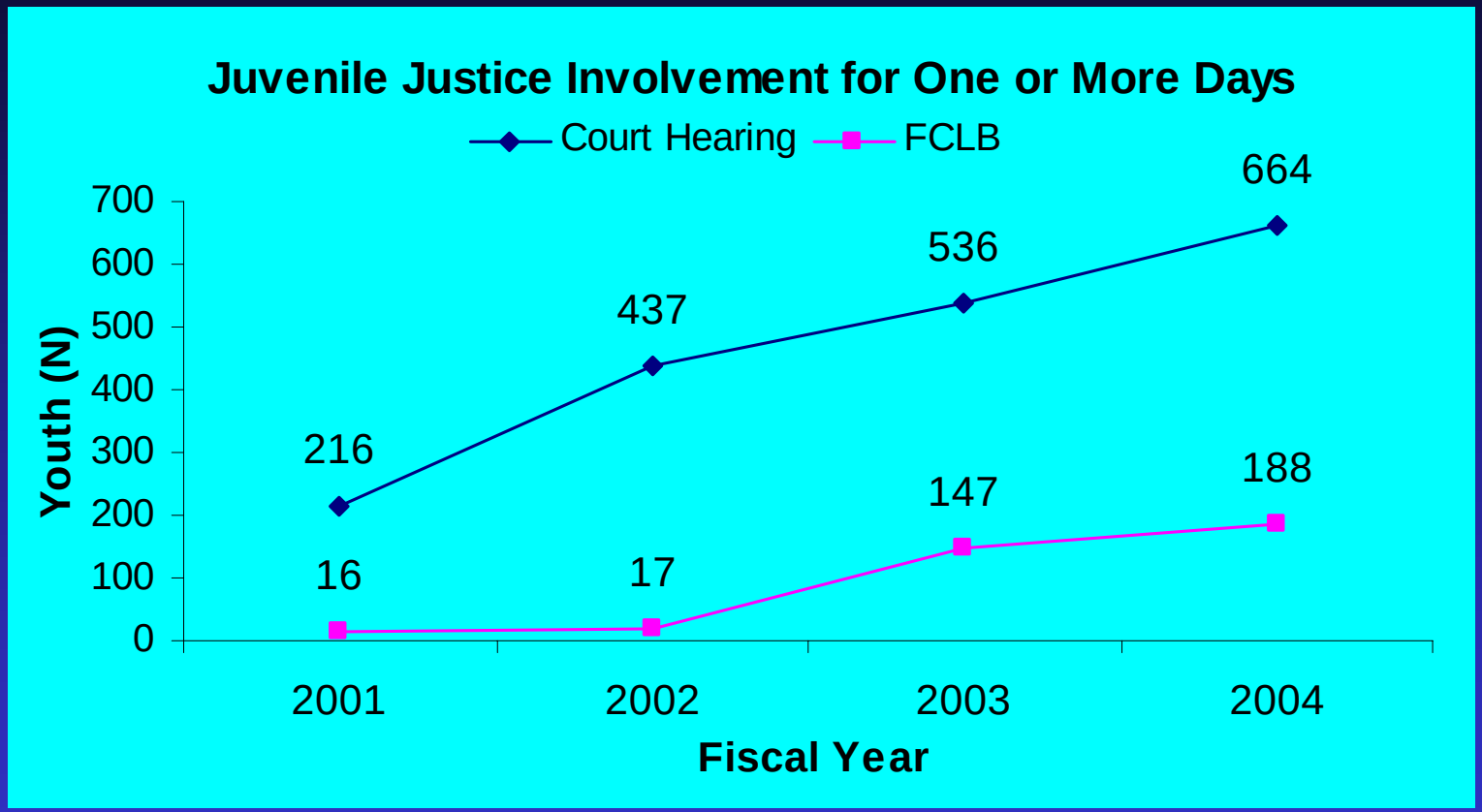
How many? Education and Health



Education: 14% Decrease ⇩

Health: 58% Increase ⇧

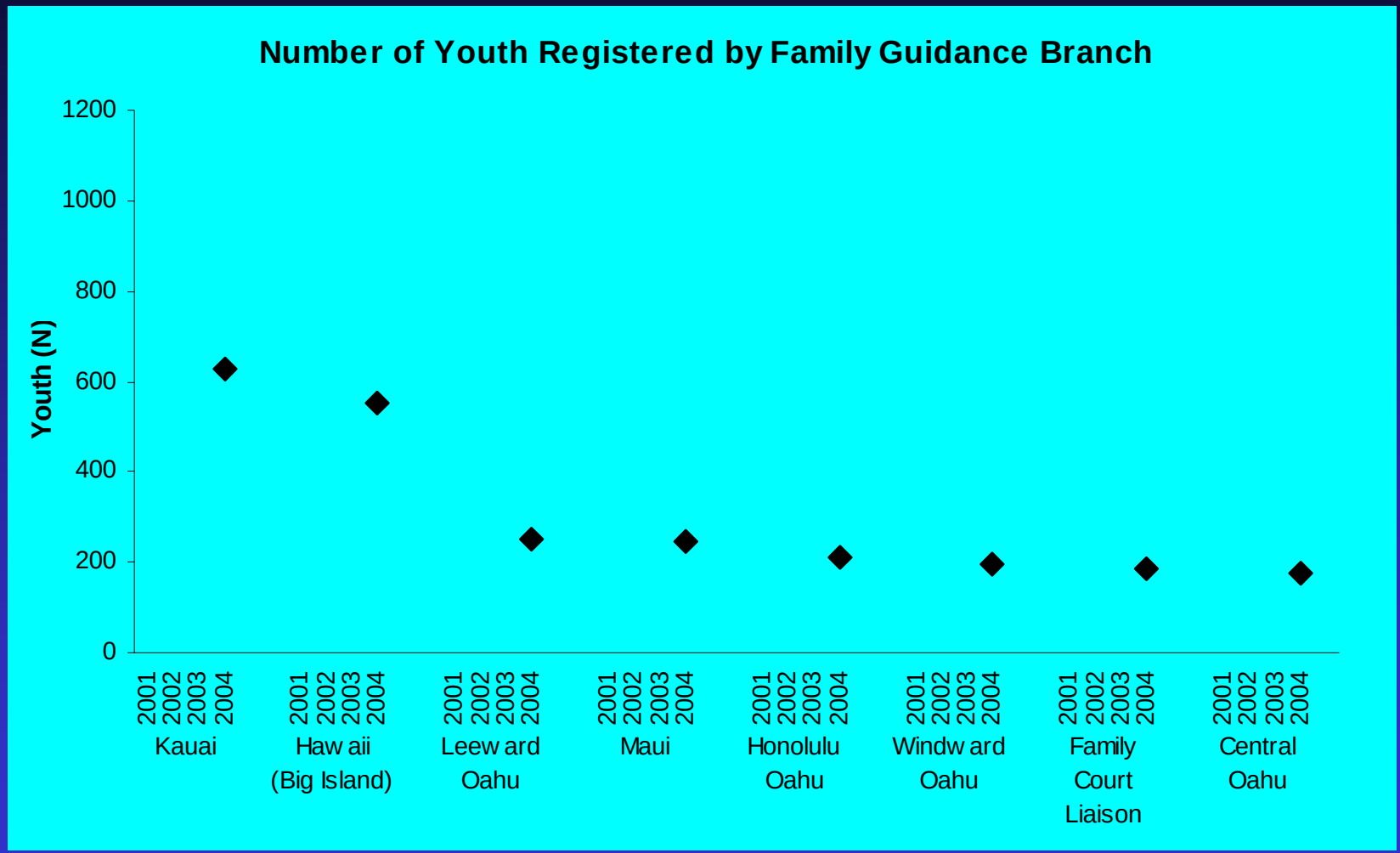
How many? Juvenile Justice



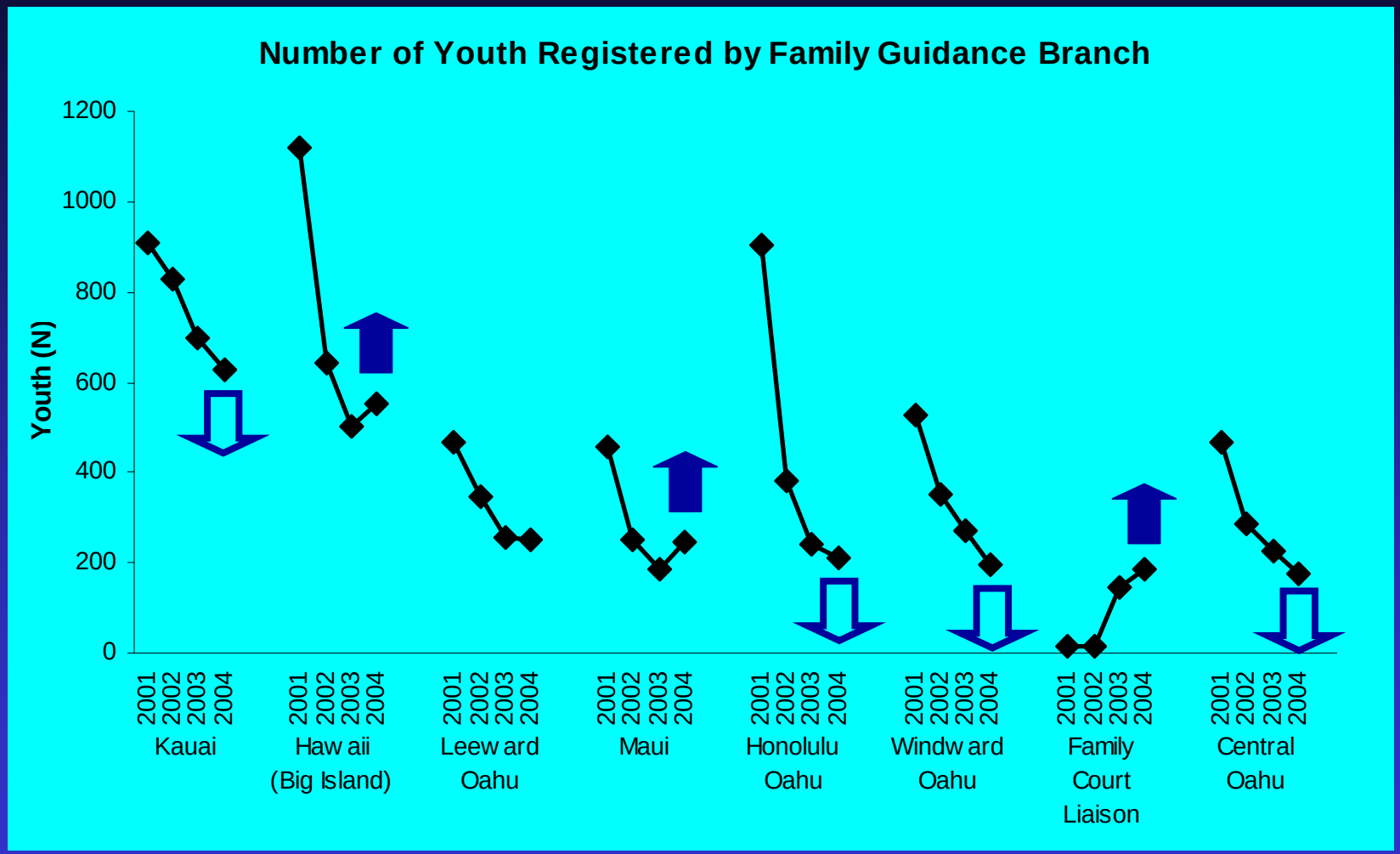
Court: 24% Increase

FCLB: 28% Increase

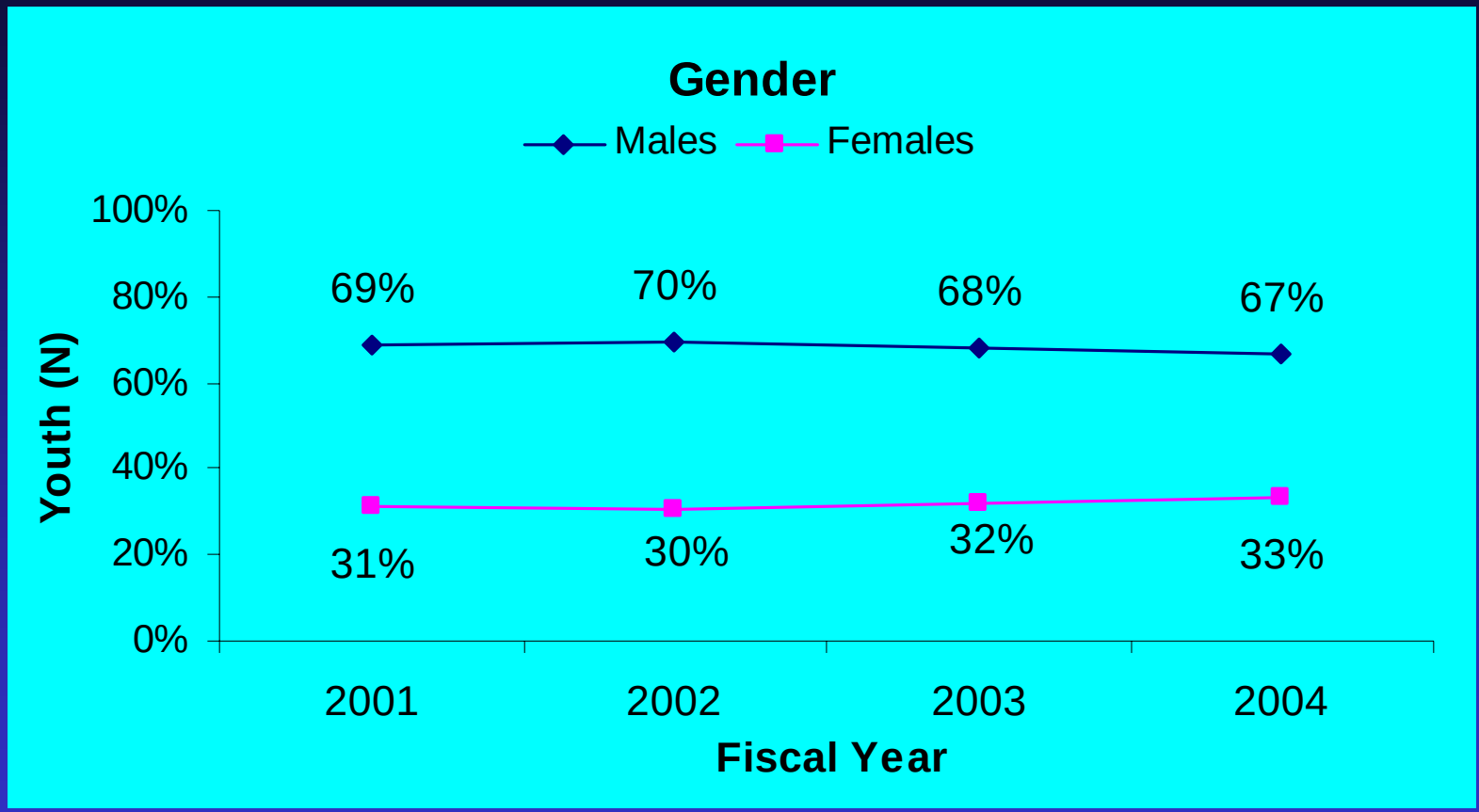
Where were they served?



Where were they served?

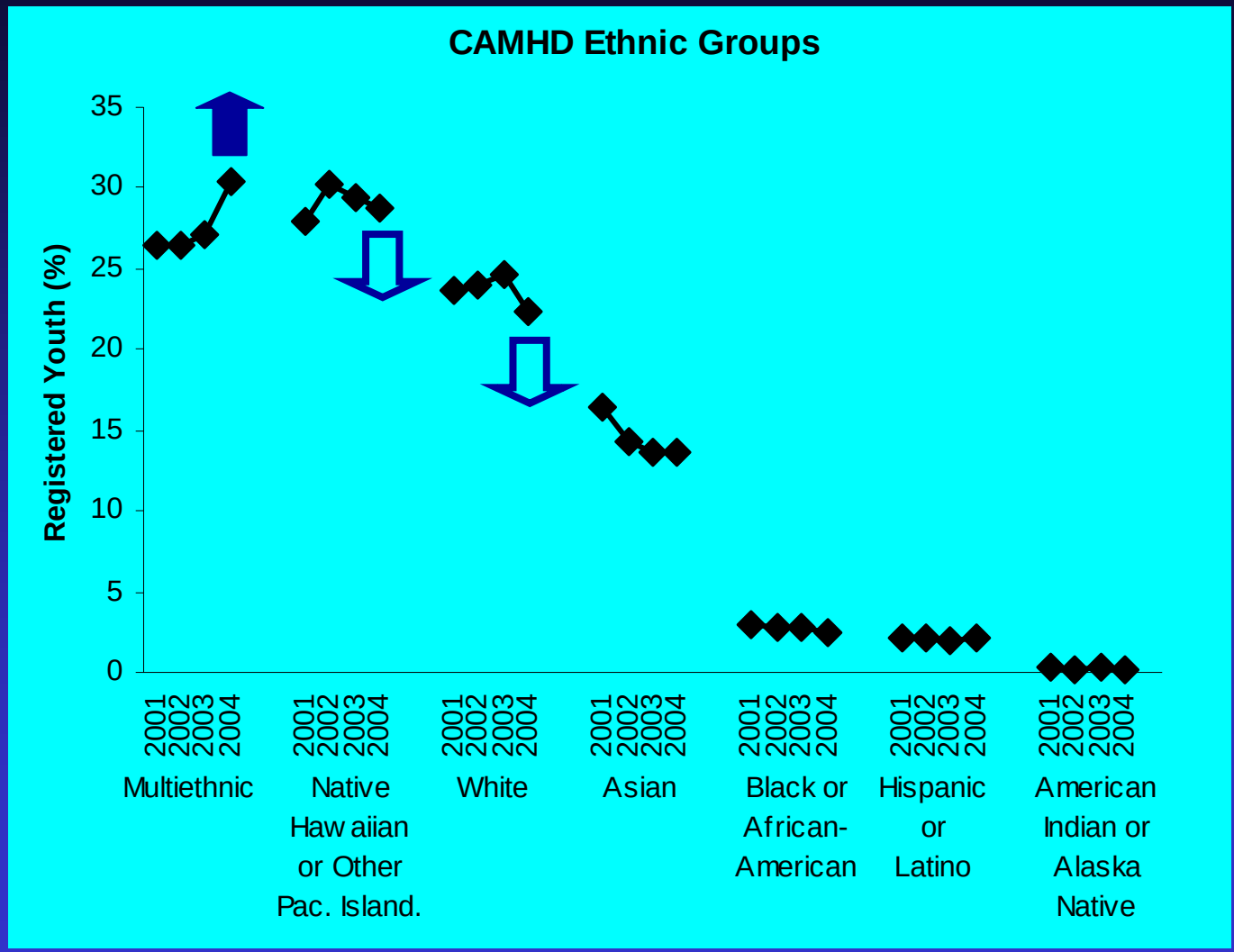


What was their gender?



No Significant Change

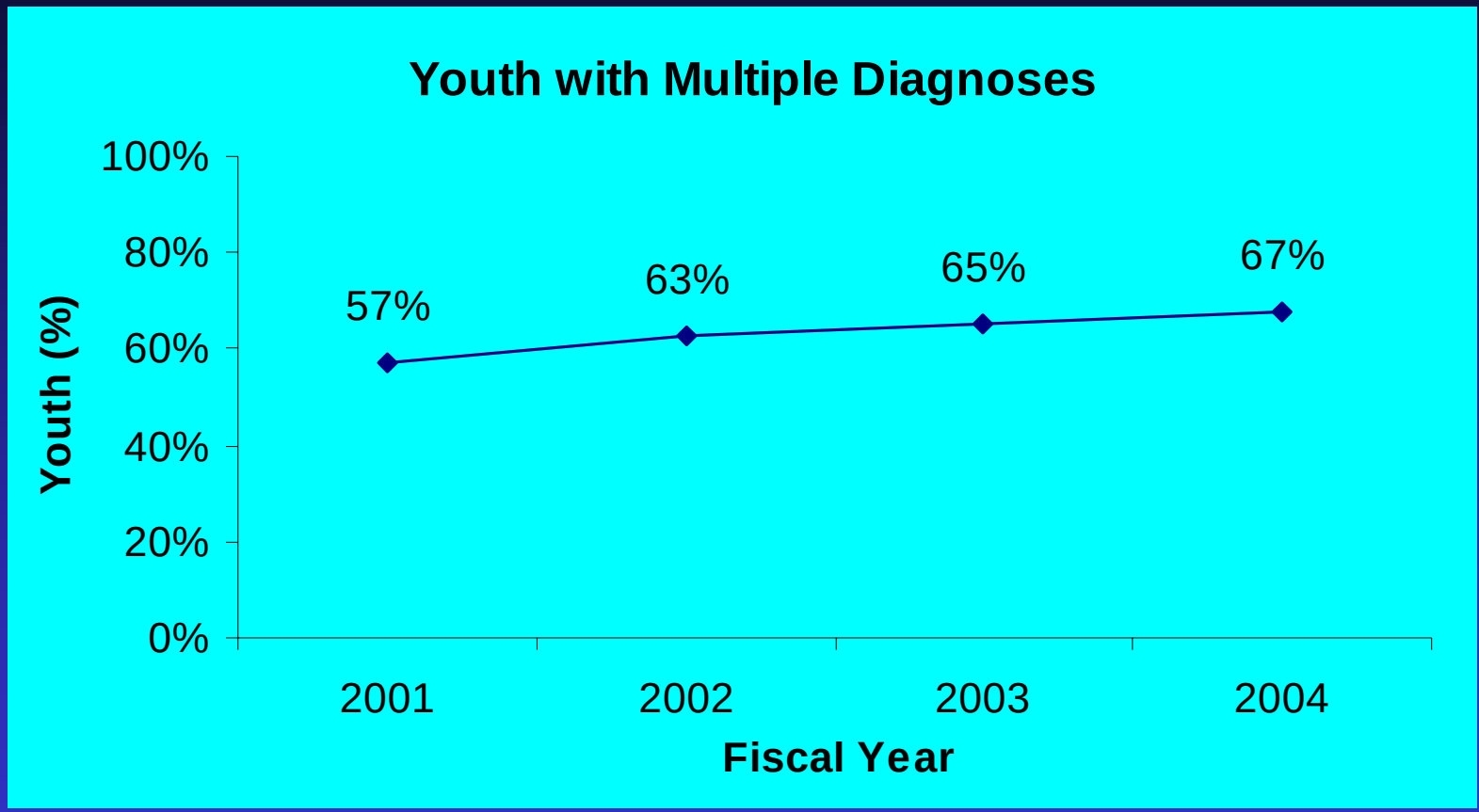
What was their race or ethnicity?



What were their primary problems?

Primary Diagnosis	2001	2002	2003	2004	
Attentional	27%	25%	26%	29%	⇧
Disruptive Behavior	23%	24%	24%	24%	
Mood	18%	19%	22%	20%	⇩
Adjustment	12%	11%	9%	8%	⇩
Anxiety	9%	9%	9%	8%	
Miscellaneous	7%	6%	5%	5%	
Substance-Related	2%	3%	3%	2%	
Psychotic Spectrum	1%	1%	1%	1%	

Did they have multiple problems?

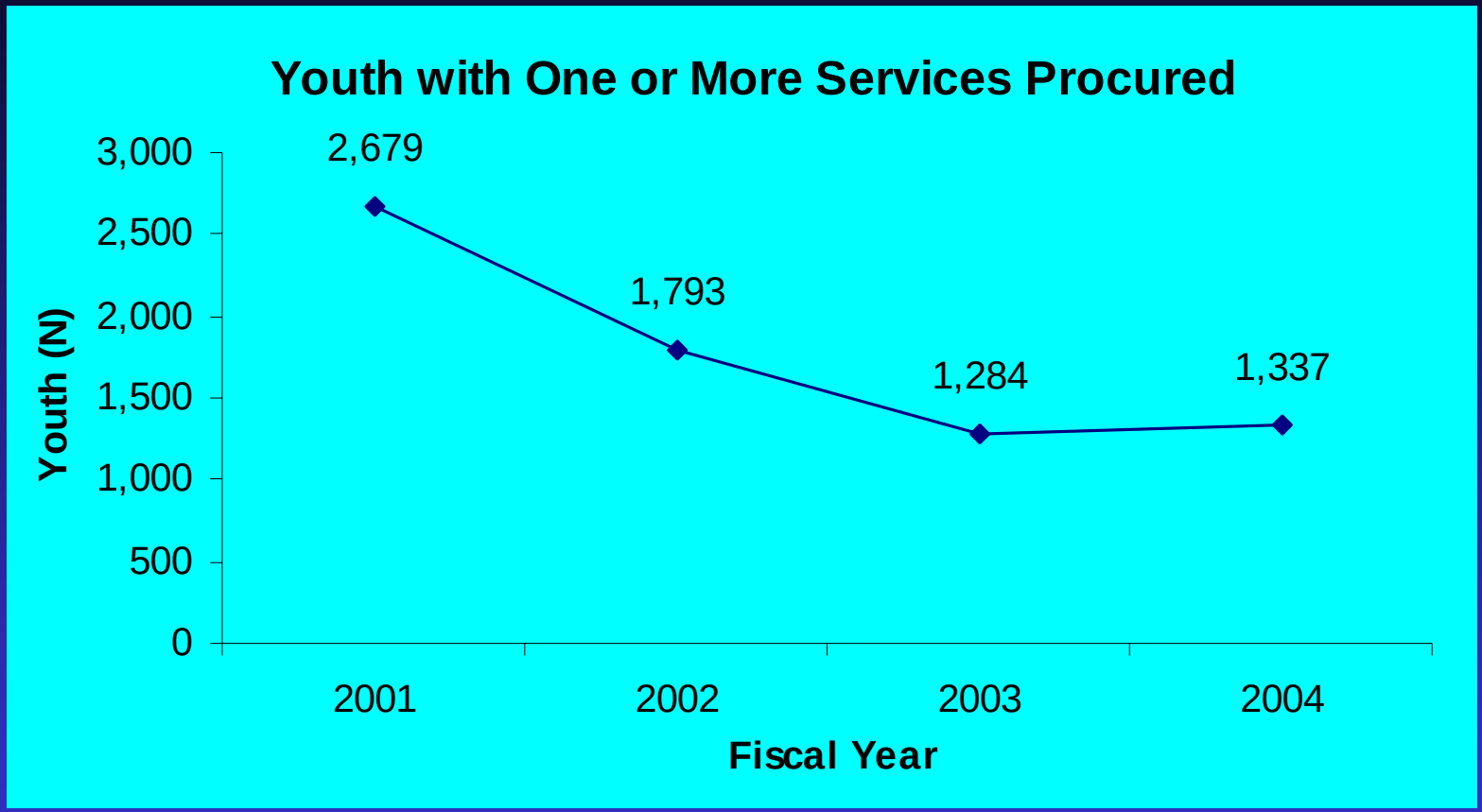


2% Increase

How were they served?

1. How much service?
2. How much cost?
3. How efficient were services?
4. Type of services?

Output: How Much Service?

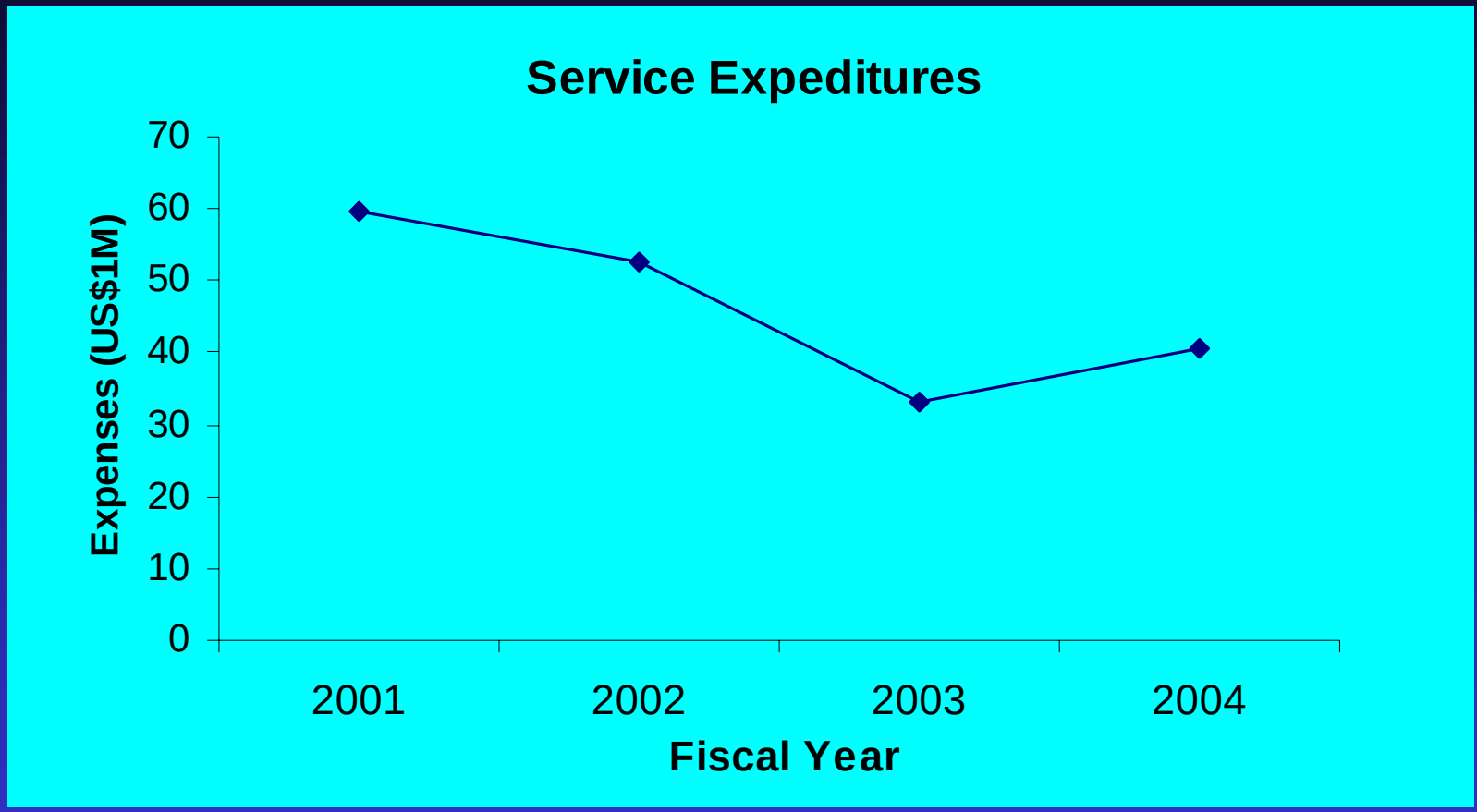


4% Increase from 2003

Excluding DOE transfers &

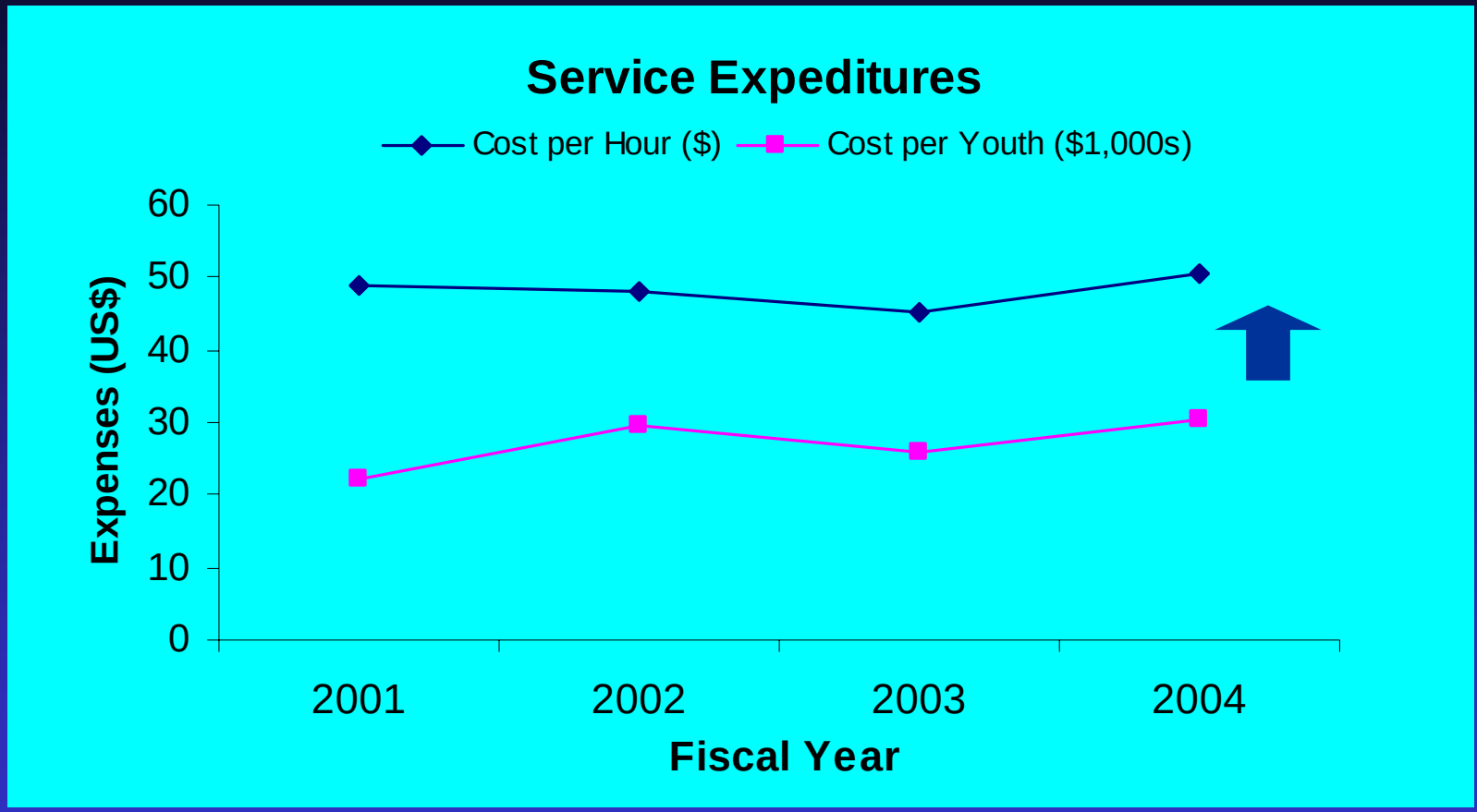
Pervasive Developmental Disorder prior to 2004

Input: How Much Cost?



23% Increase from 2003

How Efficient Were Services?

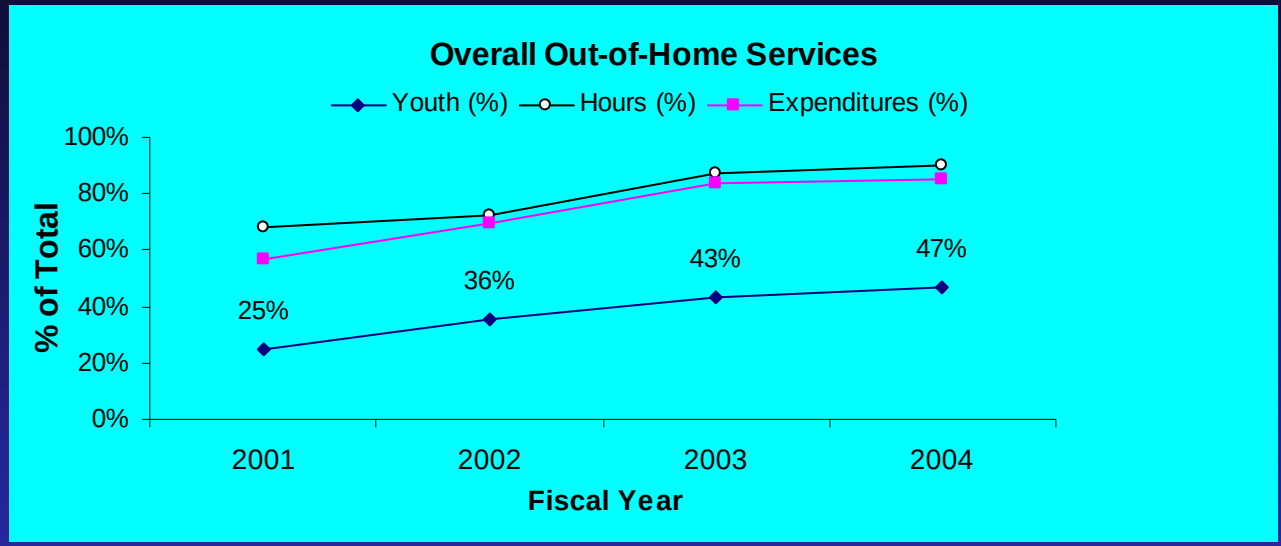


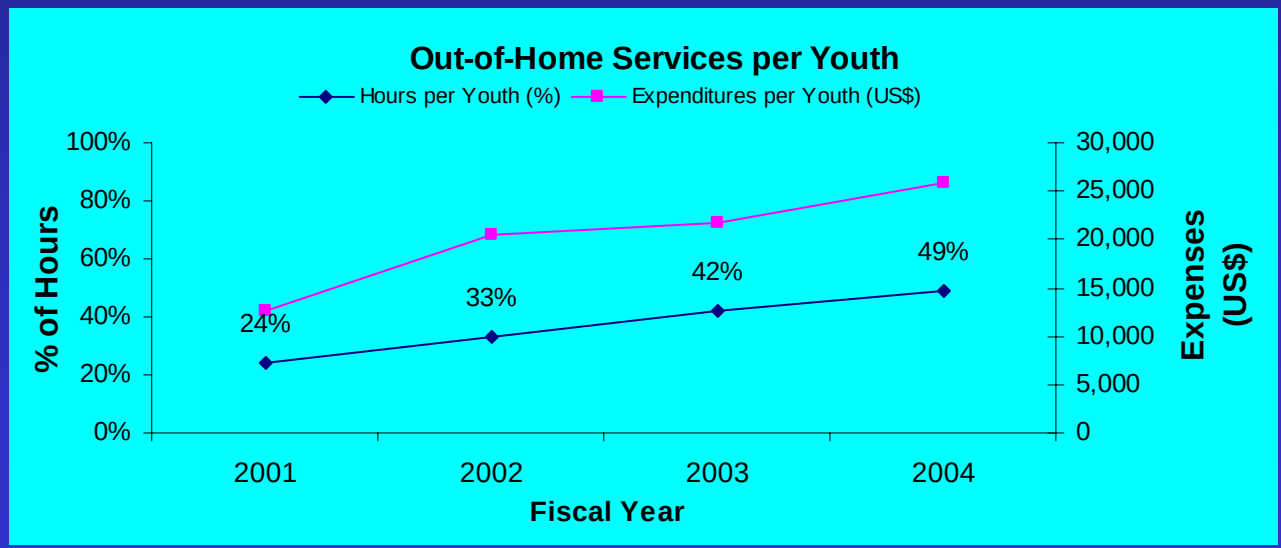
Thus, ⇧ Increased Output, ⇧ Increase Input

⇩ Decreased Efficiency

How many out-of-home services?

Multiple indicators suggest relatively greater use of out-of-home services

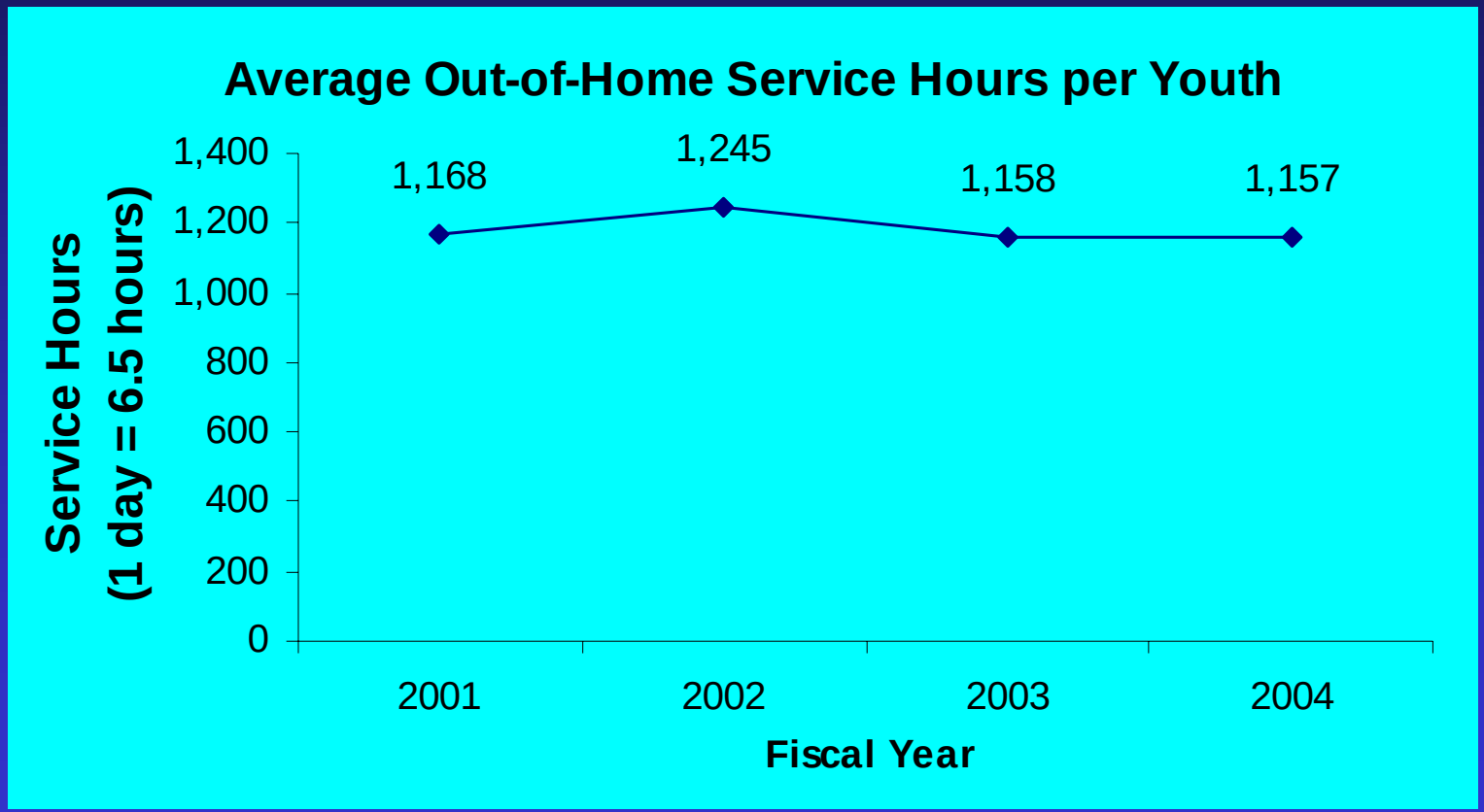




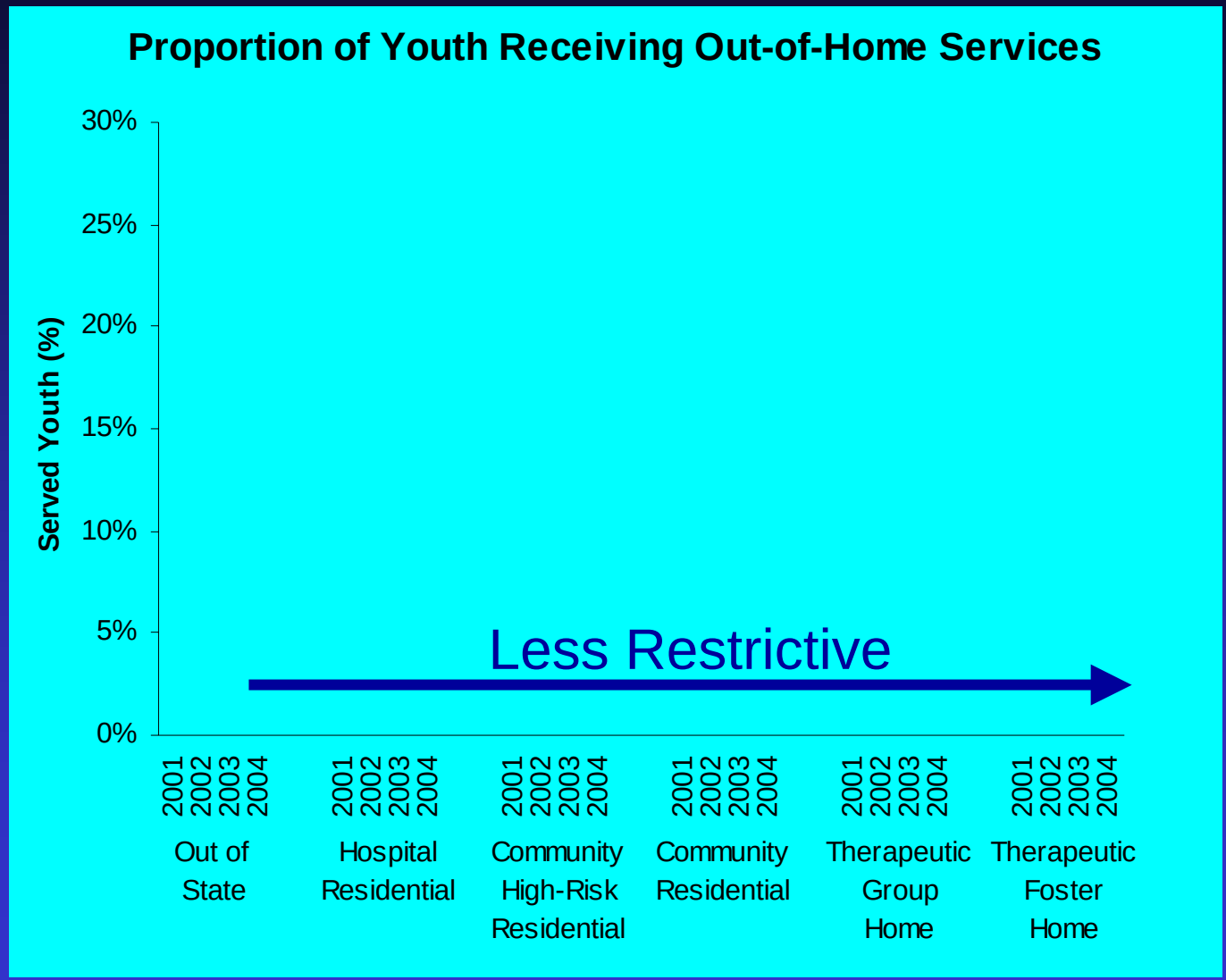
How many out-of-home services?

BUT

service intensity is relatively stable



What type of out-of-home services?



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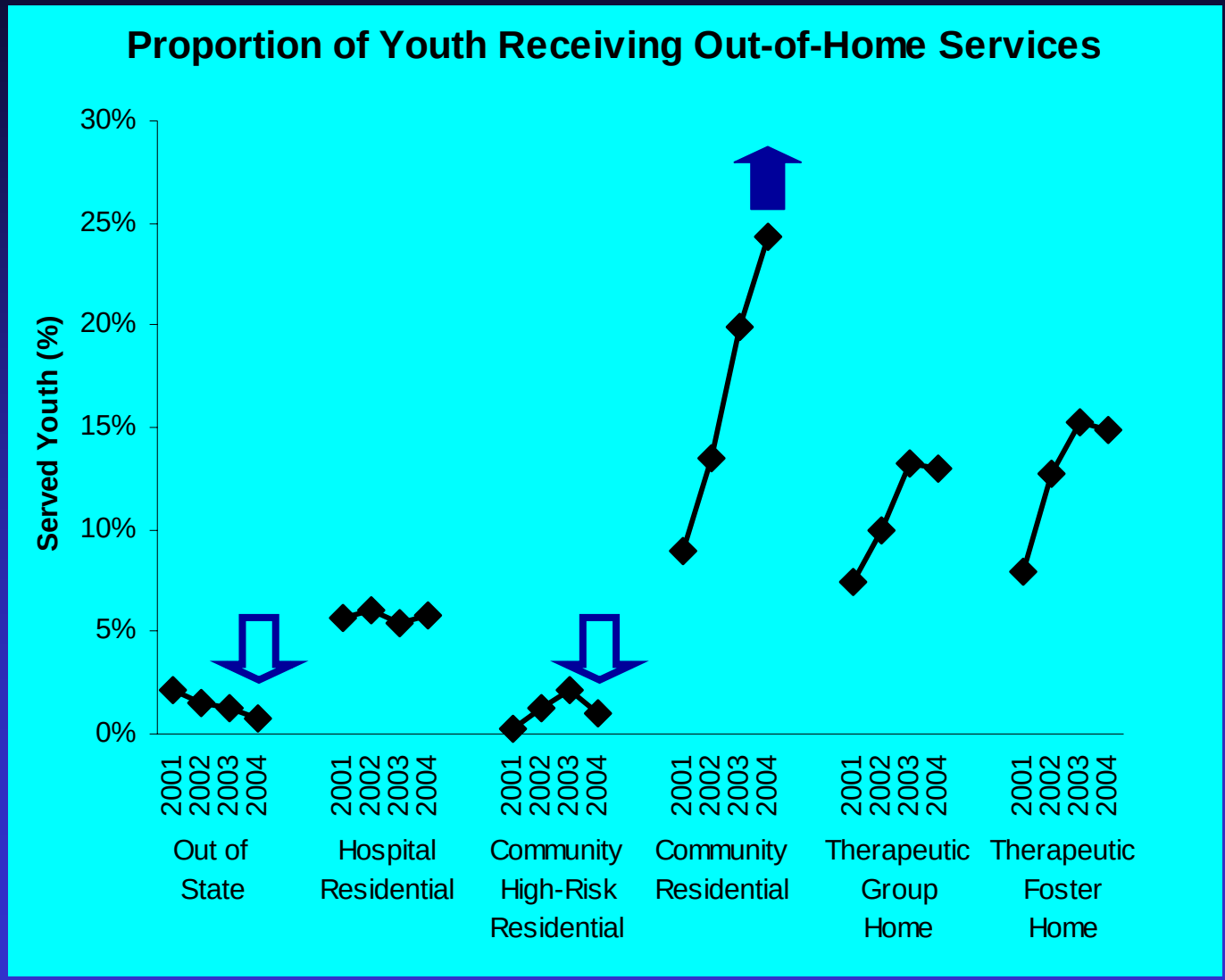
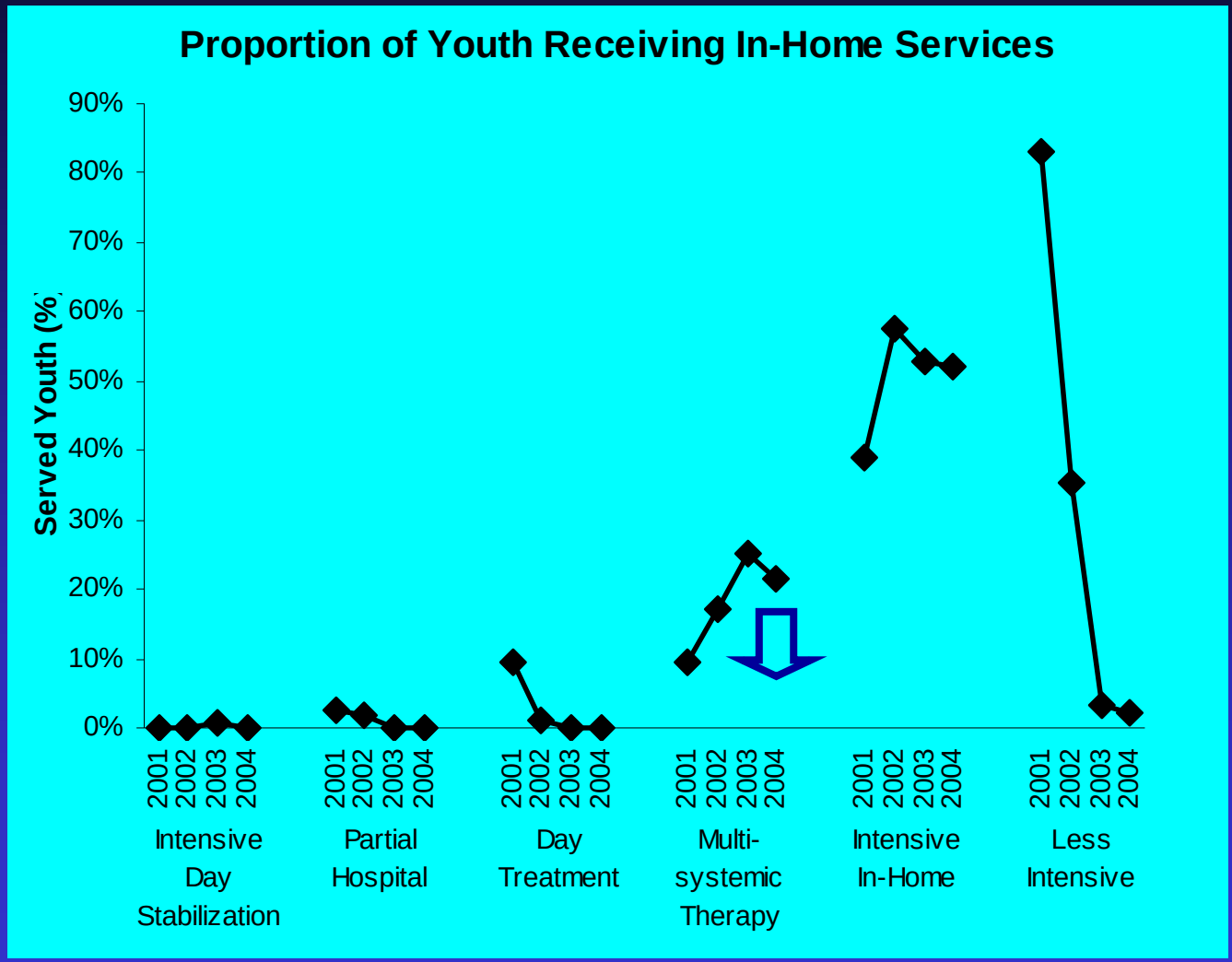
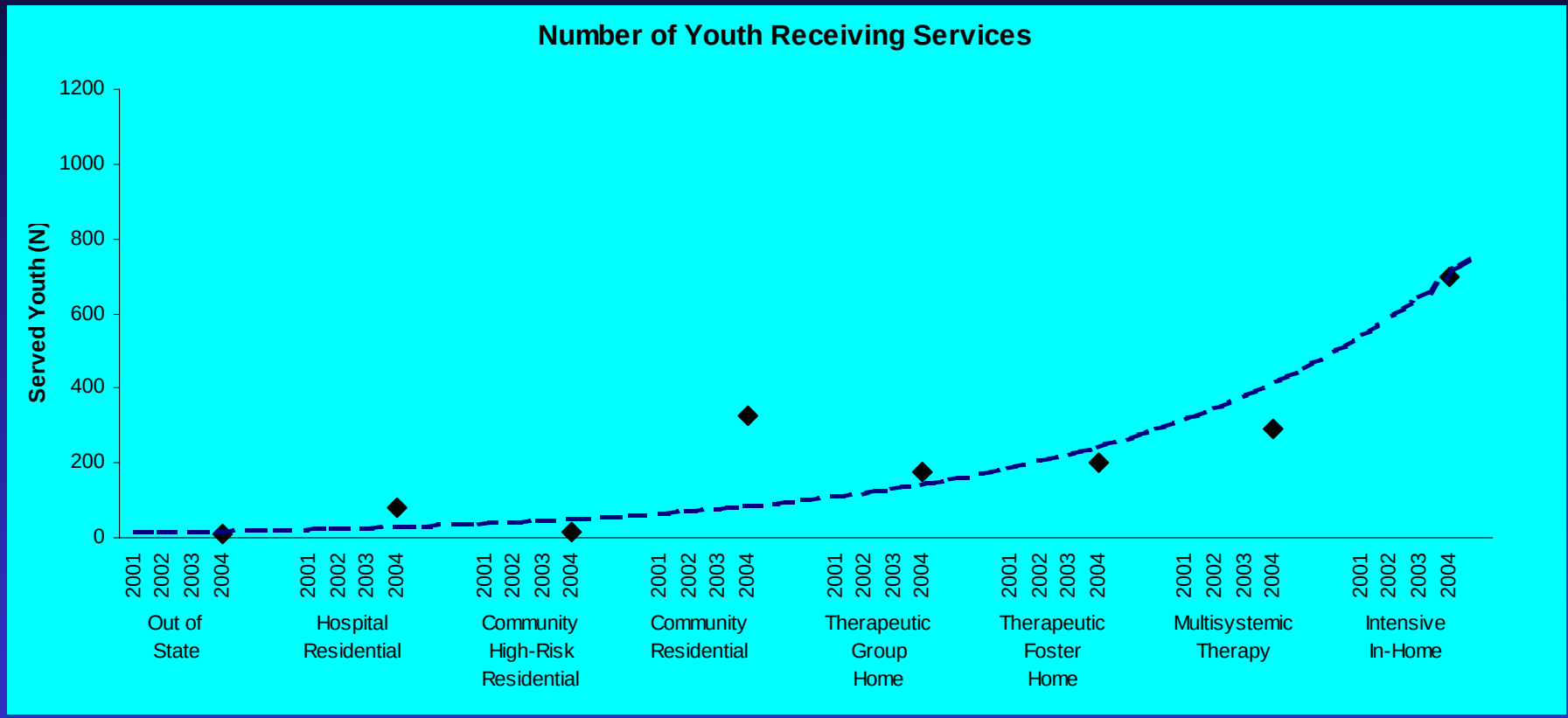


What type of in-home services?



Least Restrictive?



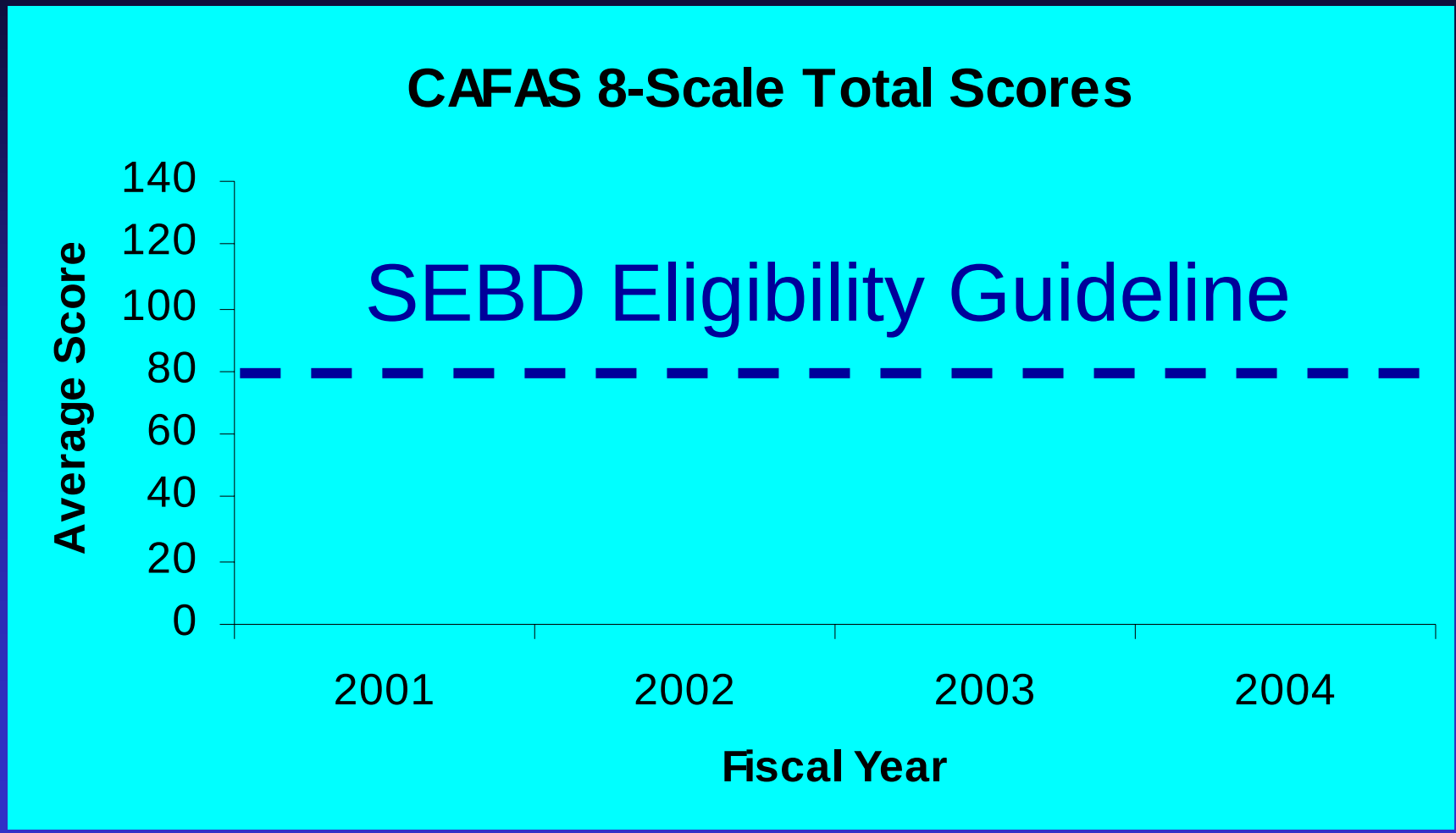
What results were obtained?

1. Youth status at registration?

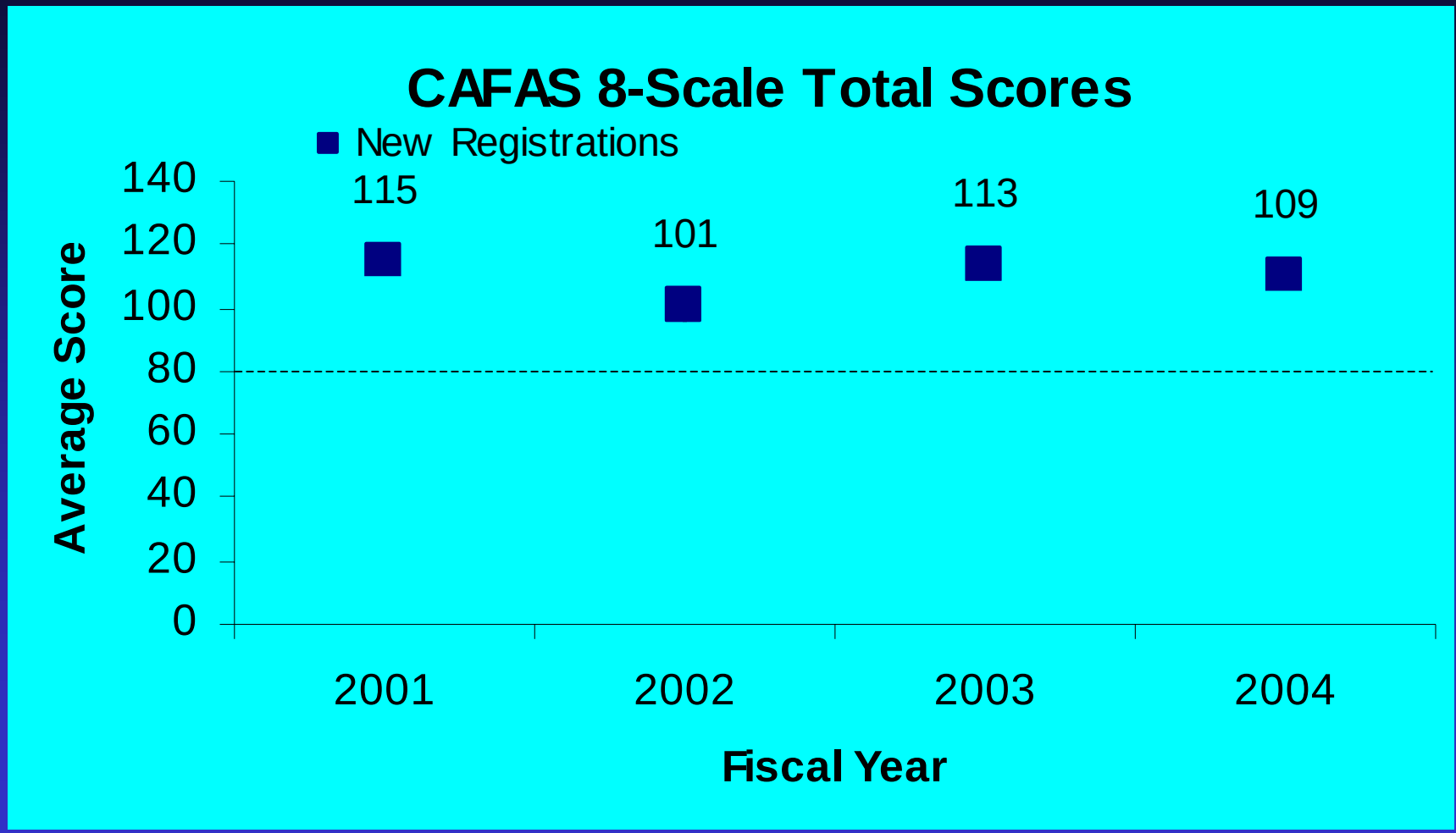
2. Do youth improve with services?

3. Has rate of improvement changed over time?

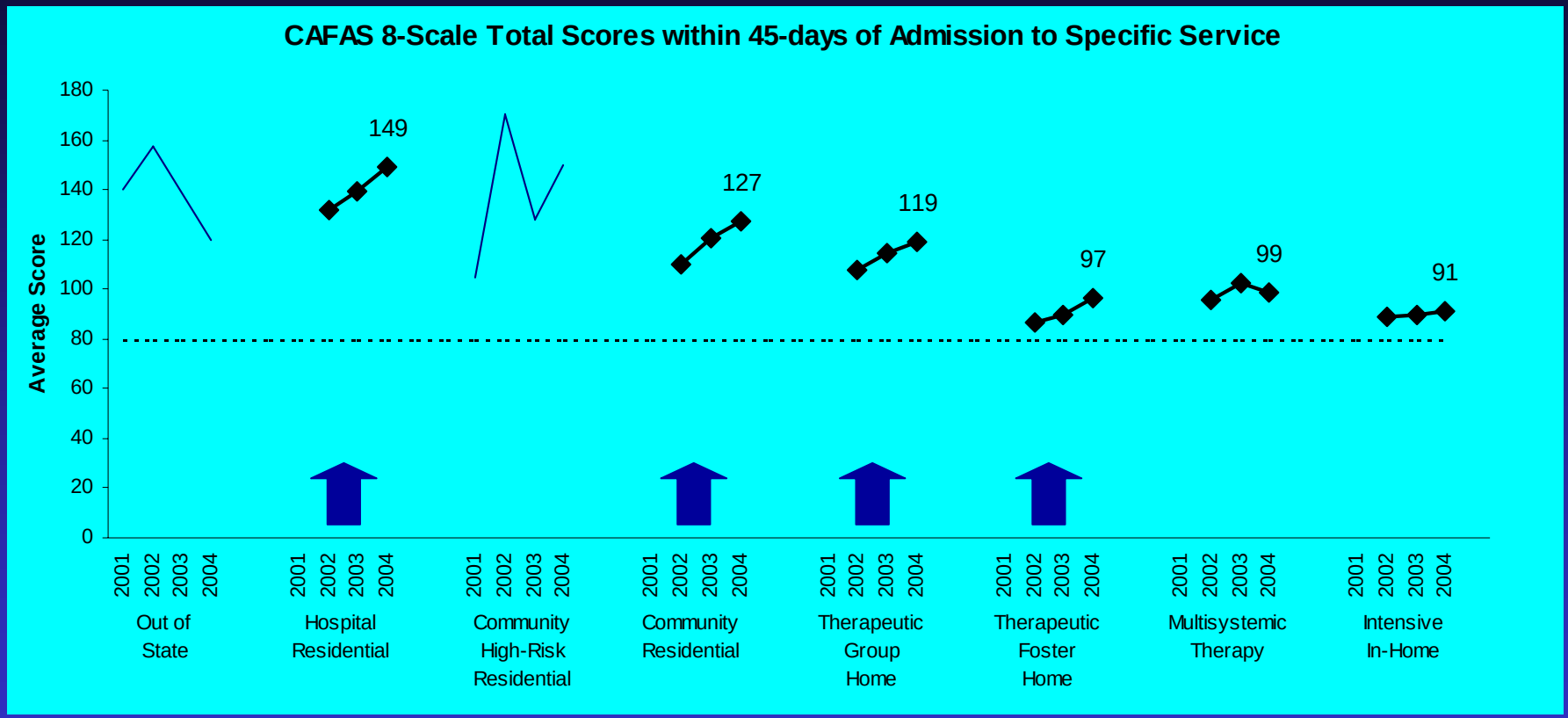
Youth Status at Registration?



Youth Status at Registration?



Youth Status at Intake?



Improvement with Services?

EBS Effect Sizes

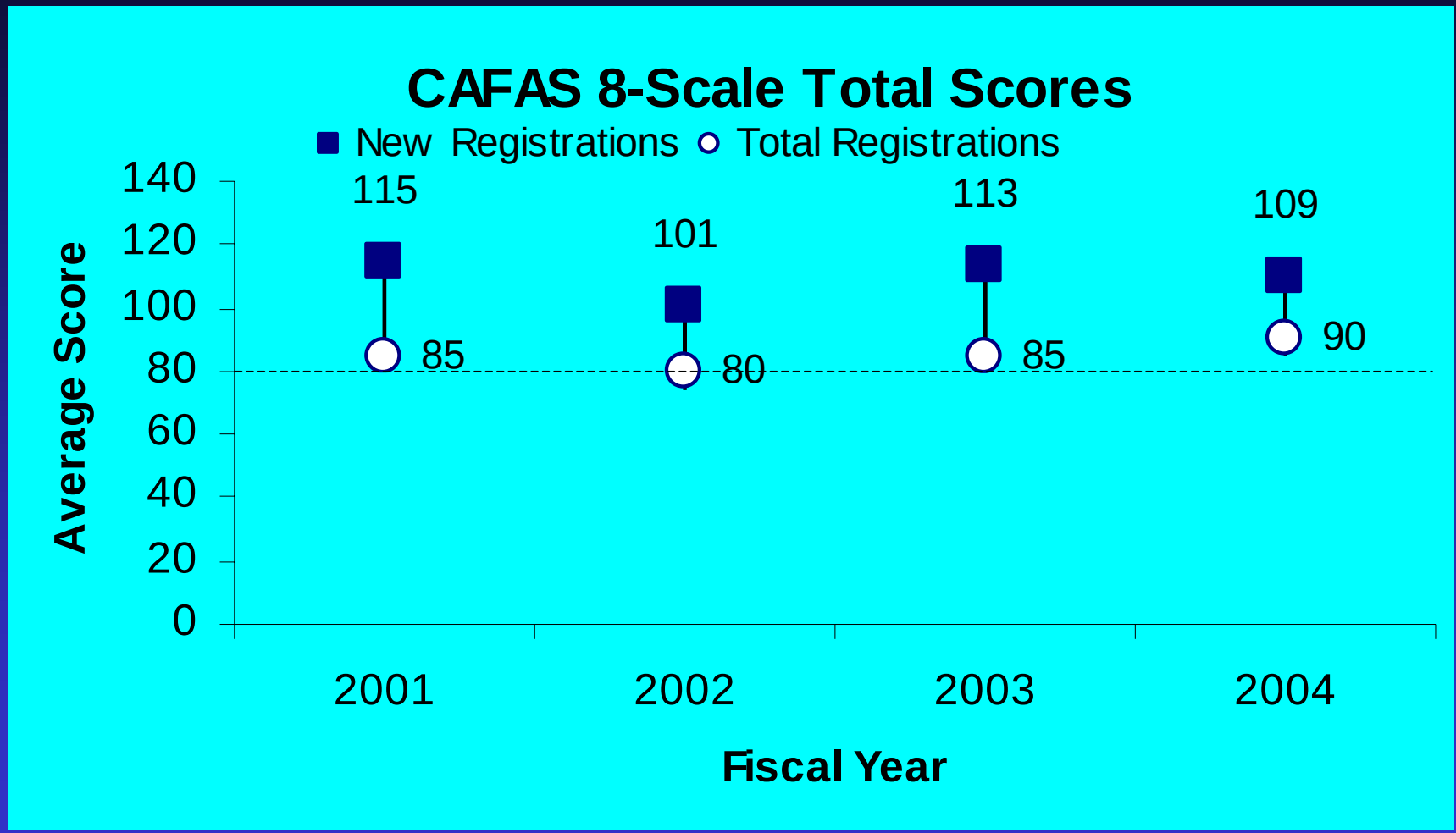
Problem Area	Level I & II Effect Sizes
Anxiety and Avoidant	0.5 – 2.0
Attention and Hyperactivity	1.6
Depressed and Withdrawn	1.4 – 1.7
Disruptive Behavior	0.5 – 1.6

Source: CAMHD (2004). Evidence-based services committee biennial report

Improvement with Services?

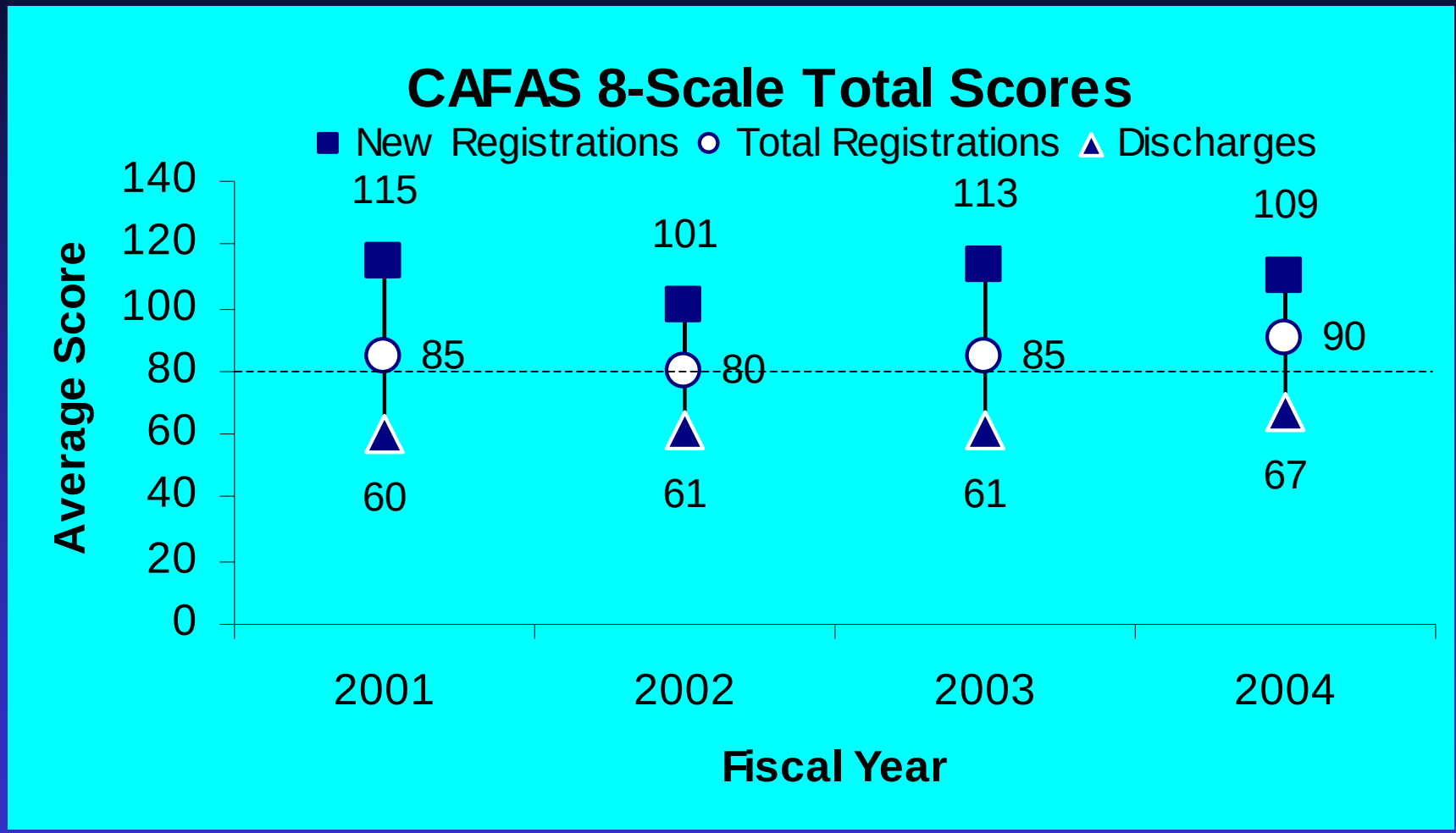
Group Differences

Improvement with Services?



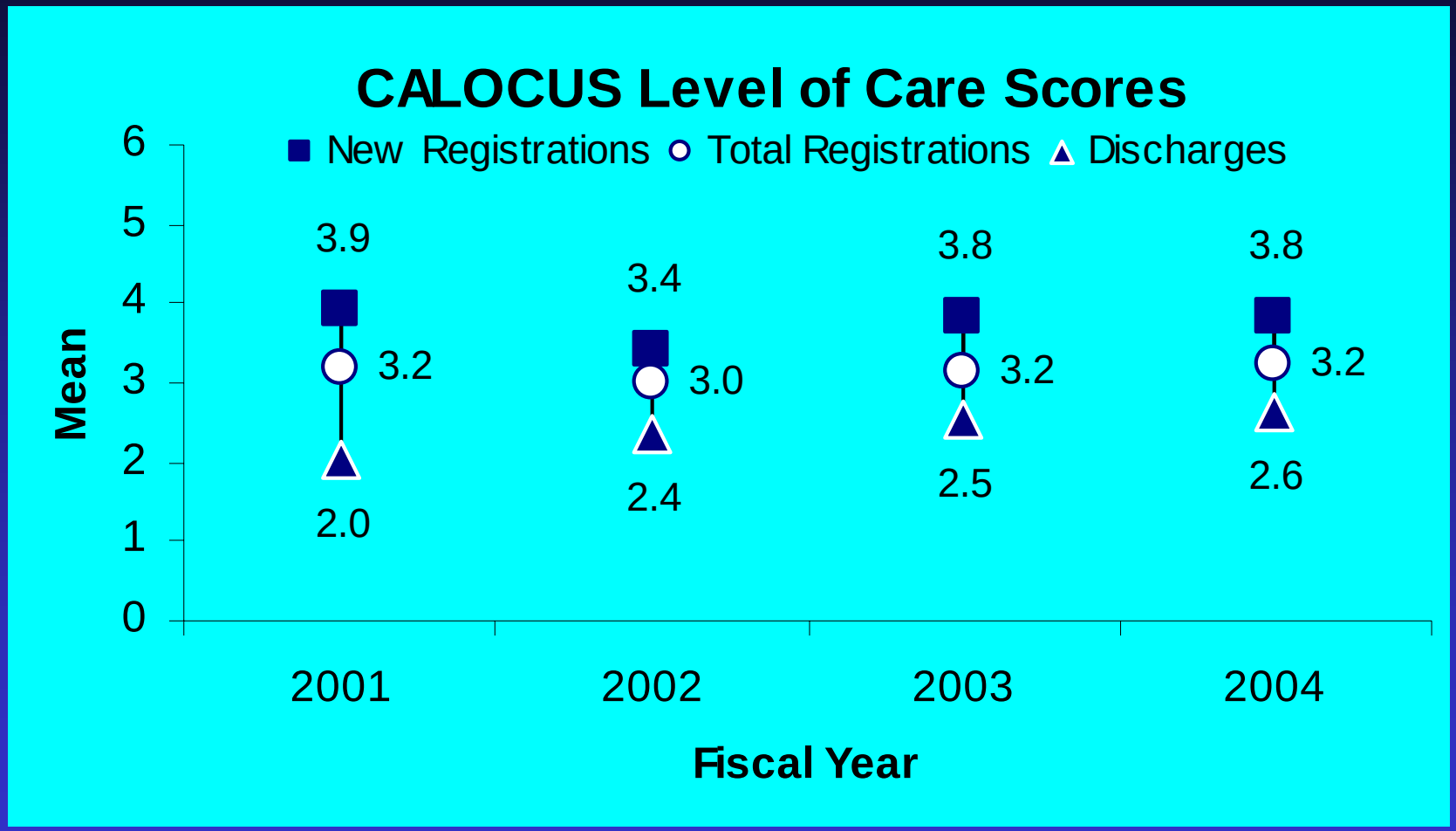
2004 Effect Size = .54

Improvement with Services?



2004 Effect Size = 1.2

Improvement with Services?

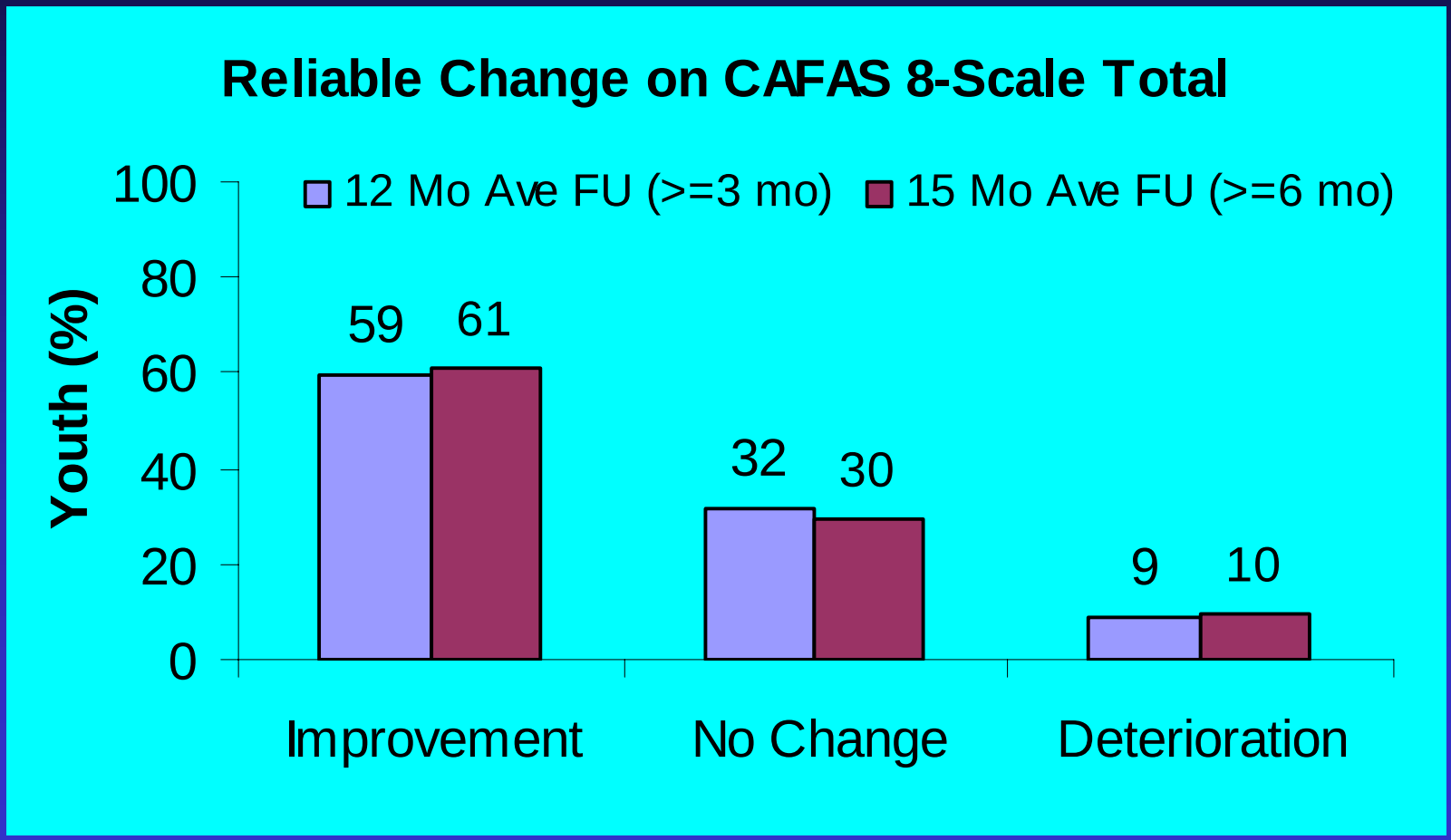


2004 Effect Sizes = .43 total, .89 discharge

Improvement with Services?

Individual Change
from Baseline to Follow-up

Improvement with Services?



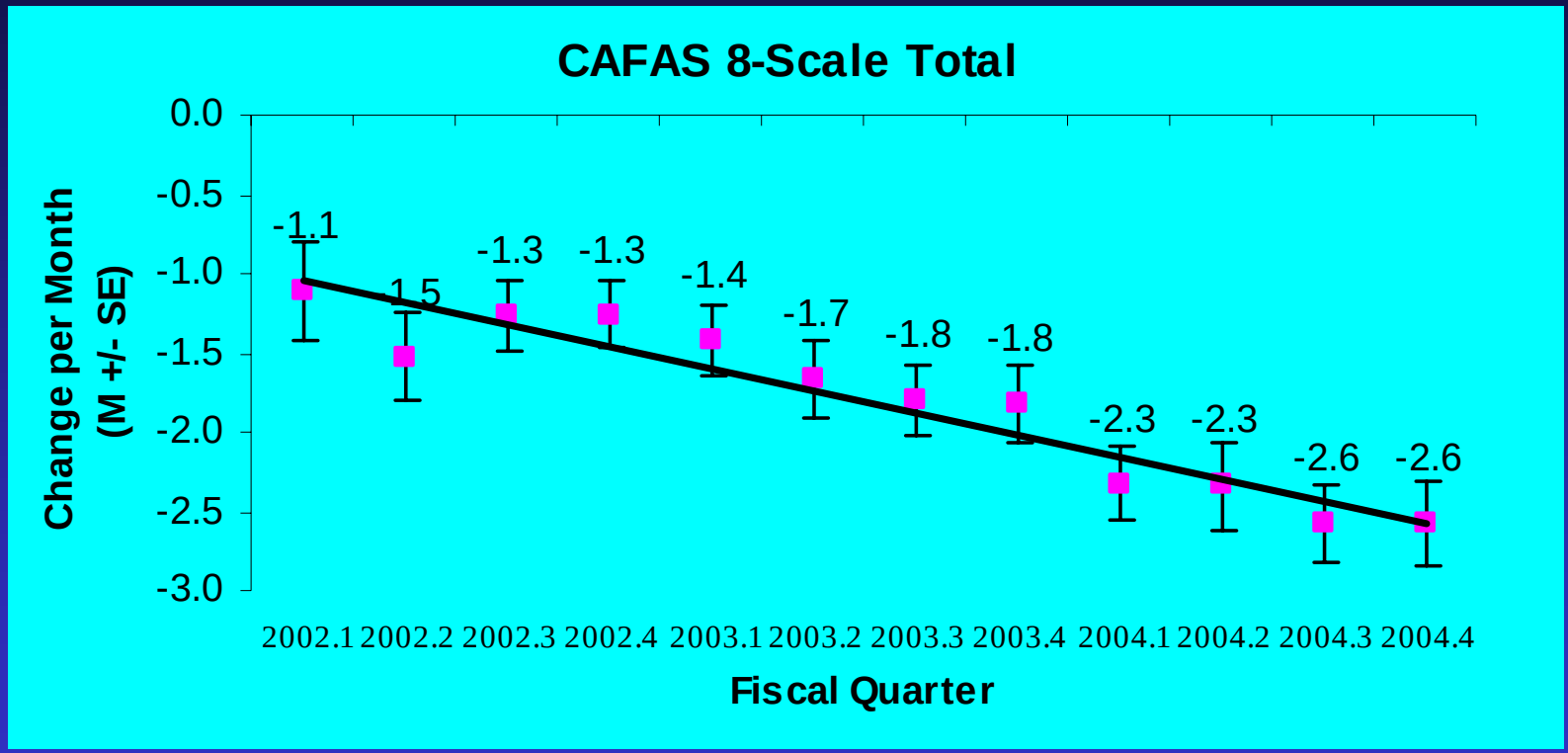
Improvement with Services?

Measure	Average Baseline	12-mo Ave. Follow-up	Effect Size (SD)
CAFAS Total (n = 843)	116	80	1.0
CALOCUS Level (n = 681)	4.1	3.0	0.9

Rate of Improvement?

Individual Change
During Episode to Point-in-Time

Rate of Improvement?



Final Effect Size Change = .07/mo, .84/yr

Take Home Messages

Who We Serve

Population size stabilizing

Balancing of education with health and juvenile justice populations

Big Island, Maui, and FCLB Showed Growth

Increasing diagnostic comorbidity but type of problems similar

Take Home Messages

How We Serve

Overall increased output with lower efficiency

Out-of-home service use continued to increase

Community-based residential use increased

Multisystemic therapy and community high-risk residential use decreased

Take Home Messages

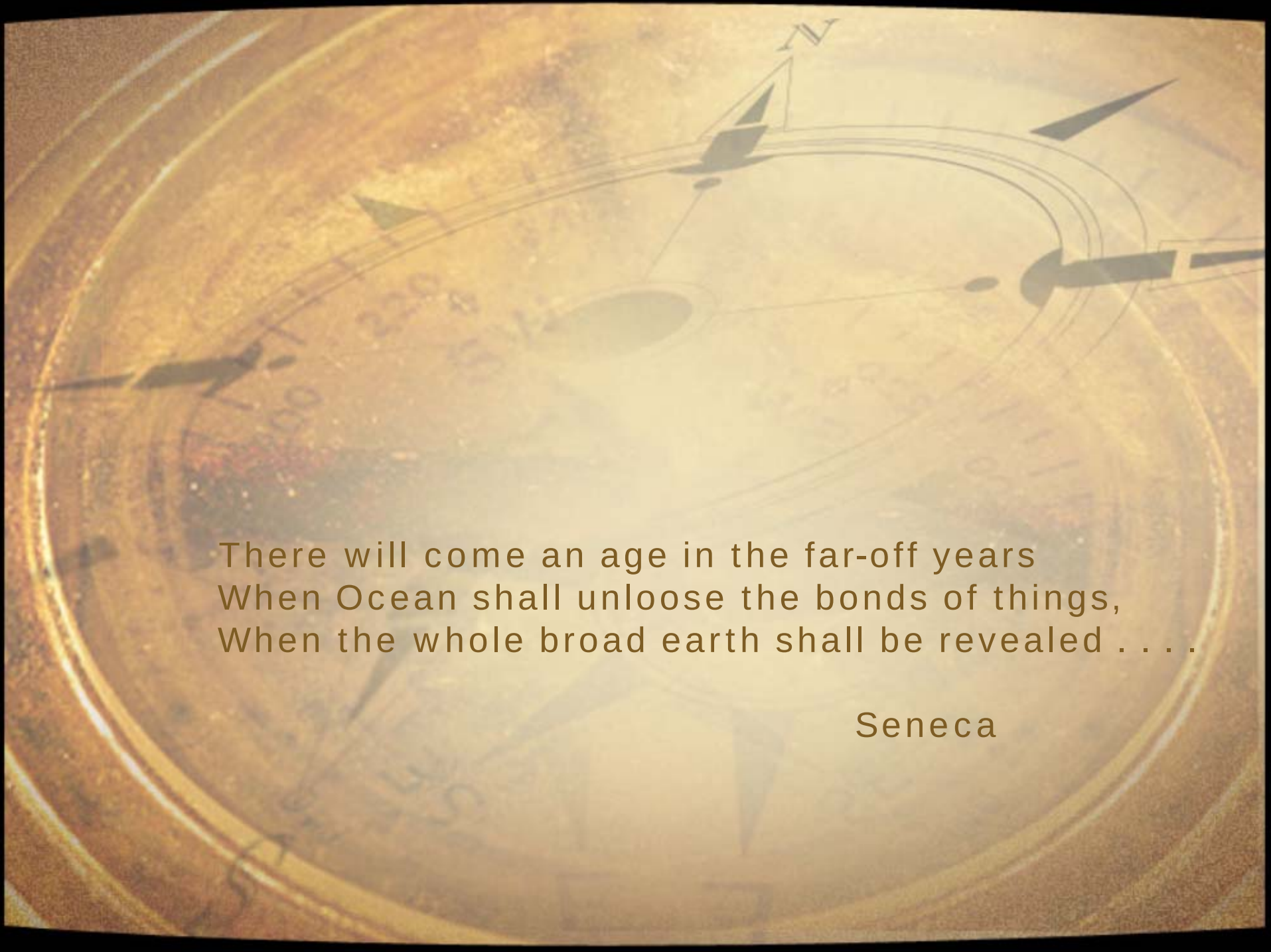
Obtaining Results

Youth enter system at high levels of impairment (e.g., CAFAS near 110)

Youth generally improve with services at an average effect size around 1.0 SD

Rate of improvement has accelerated across years


Reading the Stars


There will come an age in the far-off years
When Ocean shall unloose the bonds of things,
When the whole broad earth shall be revealed . . . .
Seneca

Efficacy Criteria for Treatments

- Strong Support (Level 1)
  - At least 2 good between group design experiments demonstrating efficacy by either:
    - Superior to placebo or another treatment.
    - Equivalent to an already established treatment.

    OR
  - A large series of single case design experiments ($n \geq 9$) demonstrating efficacy. These experiments must have:
    - Used good experimental designs.
    - Compared the intervention to another intervention.

Efficacy Criteria for Treatments

- Strong Support (Level 1)
  - Further Criteria:
    - Experiments must be conducted with treatment manuals.
    - Characteristics of the client samples must be clearly specified.
    - Effects must have been demonstrated by at least two different investigators or teams of investigators.

Efficacy Criteria for Treatments

- Good Support (Level 2)
  - Two experiments showing the treatment is superior to a waiting-list control group.

    OR

  - One between group design experiment with clear specification of group, use of manuals, and demonstrating efficacy by either:
    - Superior to placebo or another treatment.
    - Equivalent to an already established treatment.

    OR

  - A small series of single case design experiments (n > 3) with clear specification of group, use of manuals, good experimental designs, and compared the intervention to pill or psychological placebo or to another treatment.

Efficacy Criteria for Treatments

- Moderate Support (Level 3)
  - One between group design experiment with clear specification of group and treatment approach and demonstrating efficacy by either:
    - Superior to placebo or another treatment.
    - Equivalent to an already established treatment.

    OR
  - A small series of single case design experiments ($n \geq 3$) with clear specification of group and treatment approach, good experimental designs, at least two different investigators or teams, and comparison of the intervention to pill, psychological placebo, or another treatment.

Further Criteria for Treatments

- Minimal Support (Level 4)
  - Treatment does not meet criteria for Level 1, 2, 3, or 5.
- Known Risks (Level 5)
  - At least one study demonstrating harmful effects of a treatment that others would meet criteria for Level 4.

Reviewed Disorders/Problem Areas

- Anxiety Disorders
- ADHD
- Autism
- Depression
- Oppositional and Conduct Problems
- Substance Abuse
- Out of Home Services
- School Based Services

Results of the Review

Anxiety Disorders

- CBT
- CBT with Parents Included
- CBT for Child and Parents
- Educational Support
- EMDR
- Exposure
- Modeling
- Play Therapy
- Supportive Therapy

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ADHD

- Parent Training
- Classroom Behavior Management
- Social Skills Training
- “Parents are Teachers”
- Parent Effectiveness Program
- Self-Control Training

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Autism

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- Functional Communication Training/ABA
- Playschool Program
- Psychoeducation Program
- TEACCH

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Depression

- Behavioral Problem Solving
- CBT
- CBT with Parents Included
- Family Therapy
- Interpersonal Therapy
- Relaxation
- Self-Control Training
- Self-Modeling
- Supportive Therapy

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- Behavioral Problem Solving
- CBT
- CBT with Parents Included
- Family Therapy
- Interpersonal Therapy
- Relaxation
- Self-Control Training
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- Supportive Therapy

Oppositional and Conduct Problems

- Anger Control Training
- Anger Coping
- Assertiveness Training
- Client-Centered Therapy
- Communication Skills
- Functional Family Therapy
- Goal Setting
- Group Discussion
- Group Discussion of Parent Training
- Group Discussion of Videotape Modeling
- Parent Training with Child
- Parent Training without Child
- Parent Training with 2 Parents
- Human Relations Therapy
- Individual Therapy
- Juvenile Justice System
- Multisystemic Therapy
- Parent Child Interaction Therapy
- Problem Solving Skills Training
- Rational Emotive Therapy
- Relationship Therapy
- Relaxation
- Stress Inoculation
- Supportive Attention
- Treatment Foster Care

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- Human Relations Therapy
- Individual Therapy
- Juvenile Justice System
- Multisystemic Therapy
- Problem Solving Skills Training
- Rational Emotive Therapy
- Relationship Therapy
- Relaxation
- Stress Inoculation
- Supportive Attention
- Treatment Foster Care

Oppositional and Conduct Problems

- Anger Coping Therapy
- Assertiveness Training
- Client-Centered Therapy
- Communication Skills
- Functional Family Therapy
- Goal Setting
- Group Discussion
- Parent Training
- Human Relations Therapy
- Individual Therapy
- Juvenile Justice System
- Multisystemic Therapy
- Problem Solving Skills Training
- Rational Emotive Therapy
- Relationship Therapy
- Relaxation
- Stress Inoculation
- Supportive Attention
- Treatment Foster Care

Oppositional and Conduct Problems

- Anger Coping Therapy
- Assertiveness Training
- Client-Centered Therapy
- Communication Skills
- Functional Family Therapy
- Goal Setting
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- Parent Training
- Human Relations Therapy
- Individual Therapy
- Juvenile Justice System
- Multisystemic Therapy
- Problem Solving Skills Training
- Rational Emotive Therapy
- Relationship Therapy
- Relaxation
- Stress Inoculation
- Supportive Attention
- Treatment Foster Care

Substance Use

- Behavior Therapy
- CBT
- Conjoint Family Therapy
- Family Drug Education
- Family Systems Therapy
- Family Effectiveness Training
- Group Therapy
- Individual Therapy
- Interactional Therapy
- Multisystemic Therapy
- One Person Family Therapy
- Purdue Brief Family Therapy
- Strategic Structural Systems Engagement
- Supportive Therapy
- Training in Parenting Skills

Substance Use

- Behavior Therapy
- CBT
- Conjoint Family Therapy
- Family Drug Education
- Family Systems Therapy
- Family Effectiveness Training
- Group Therapy
- Individual Therapy
- Interactional Therapy
- Multisystemic Therapy
- One Person Family Therapy
- Purdue Brief Family Therapy
- Strategic Structural Systems Engagement
- Supportive Therapy
- Training in Parenting Skills

Broadening Evidence

- Feasibility
- Generalizability
- Cost/Benefit

Feasibility

- Acceptability
  - How many participate?
- Dropouts
  - How many complete?
- Trainability
  - Manuals and training materials available?

Generalizability

- Child/Family
  - Age; Culture; SES
- Therapist
  - Training; Degree
- Setting
  - School; Clinic
- Frequency
  - Daily; weekly
- Duration

Cost and Benefit

- Demands on system
- Expected benefit
  - Effect size (how much will the average child improve?)

The EBS Tables

Anxiety

Table 3. Effective Interventions for Anxious and Avoidant Behavior Problems

Intervention	Train	Compliance	Gender	Age	Ethnicity	Therapist	Frequency	Duration	Format	Setting	Robustness	Cost	Year	Effect Size
Level 1														
CBT	High	89%	Both	2 to 17	Caucasian; Armenian; African American	Undergrad; MA; PhD	Weekly	3 to 16 weeks	Group; Individual	Clinic; School	High	Low	2004	.87[a,b]
Exposure	High	*	Both	3 to 17	Caucasian; Japanese; African American	Undergrad; BA; MA; PhD	Daily; Weekly	1 day to 12 weeks	Group; Individual	Clinic; School	High	Low	1996	2.02[a,b]
Modeling	*	*	Both	3 to 13	Caucasian; African American	Not Specified	2/day; Daily; Weekly	1 day to 8 weeks	Group; Individual	Clinic	High	Low	1993	0.55[b]
Level 2														
CBT with Parents Included	High	93%	Both	14 to 18	Not Specified	MA; PhD	Weekly	12 weeks	Group; Individual	Clinic	Low	Low	1998	1.68[a,b]
CBT plus CBT for Parents	High	91%	Both	7 to 14	Not Specified	Not Specified	Weekly	12 weeks	Group	Clinic	Low	Low	1998	0.47[a]

Note. CBT = Cognitive Behavior Therapy; "Train" = Trainability; Effect sizes reported are the median effect size across all relevant studies (a = Revised Children's Manifest Anxiety Scale; Reynolds & Richmond, 1978; b = Child Behavior Checklist, Internalizing Scale; Achenbach, 1991). * Could not be determined due to lack of information in published reports. "Year" refers to the most recent study coded.

ADHD

Table 4. Effective Interventions for Attention and Hyperactivity Behavior Problems (including ADHD)

Intervention	Train	Compliance	Gender	Age	Ethnicity	Therapist	Frequency	Duration	Format	Setting	Robustness	Cost	Year	Effect Size
Level 1														
Behavior Therapy	High	89%	Both	3 to 12	Caucasian*	Teacher; teacher's aide; MA; PhD	Daily to Weekly	1 to 12 weeks	Group; Individual	Clinic; School	High	Low	2001	1.57[a,b]

Note. "Train" = Trainability; "N/A" = not reported; Effect sizes reported are the median effect size across all relevant studies (a = ADHD Rating Scale; DuPaul, 1991; b = Parental Account of Childhood Symptoms-ADHD; Taylor et al., 1991). * A single study described its sample as "predominantly Caucasian." "Year" refers to the most recent study coded.

Autism

Table 5. Effective Interventions for Autism

Intervention	Train	Compliance	Gender	Age	Ethnicity	Therapist	Frequency	Duration	Format	Setting	Robustness	Cost	Year	Effect Size
Level 3														
FCT and ABA	Mod	100%	Both	2 to 15	African American (95% not specified)	Parent; Teacher; BA; MA	5/day to 2/week	2 weeks to 11 months	Individual	School	High	Low	1997	*
Caregiver Based Intervention Program	High	100%	Both	2 to 6	Not Specified	BA	Weekly	12 weeks	Group	Day Care	Low	Low	1998	0.81[a]

Note. ABA = Applied Behavior Analysis; FCT = Functional Communication Training; "Mod" = Moderate; "Train" = Trainability; Effect sizes reported are the median effect size across all relevant studies (a = TRE-ADD Autism Quiz; Factor, Perry, Freeman, & Darjes, 1987). No treatments were supported at Level 1 or Level 2. ABA/FCT and Caregiver Based Intervention Program were supported only as "focal" treatments, meaning they only addressed certain aspects of child or family functioning and made no claims about eliminating the presence of autism. "Year" refers to the most recent study coded.

Substance Use

Table 8. Effective Interventions for Substance Use

Program	Train	Compliance	Gender	Age	Ethnicity	Therapist	Frequency	Duration	Format	Setting	Robustness	Cost	Year	Effect Size
Level 1														
CBT	High	71%	Both	11 to 18	Caucasian; African American	MA; PhD	Once or twice per week	10 to 12 weeks	Group	In-patient	Mod	Low	1998	1.19
Level 2														
Behavior Therapy	High	*	Both	13 to 18	Caucasian	BA; MA	2/week	6 months	Individual	Clinic	High	Low	1994	4.20
Purdue Brief Family Therapy	Mod	82%	Both	12 to 22	Not Specified	N/A	Weekly	12 weeks	Individual	Clinic	Mod	Low	1990	N/A
Family Systems Therapy	Mod	78%	N/A	11 to 20	Caucasian; Hispanic American African American	MA	Weekly	7 to 15 weeks	Individual	Clinic	Mod	Low	1992	N/A

*Note. "Mod" = Moderate; "Train" = Trainability; "N/A" = not reported; Effect sizes reported are the median effect size across all relevant studies. * Could not be estimated due to lack of information in published reports. "Year" refers to the most recent study coded.*

Depression

Table 6. Effective Interventions for Depression and Withdrawn Behavior Problems

Intervention	Train	Compliance	Gender	Age	Ethnicity	Therapist	Frequency	Duration	Format	Setting	Robustness	Cost	Year	Effect Size
Level 1														
CBT	High	94%	Both	9 to 18	Caucasian; Puerto Rican; African American	MA; PhD	Weekly or Twice per week	5 to 16 weeks	Individual or group	Clinic; School	High	Low	1999	1.74[a]
Level 2														
CBT with Parents Included	High	88%	Both	14 to 18	Not Specified	MA; PhD	Twice per week	7 to 8 weeks	Group	Clinic	Low	Low	1999	1.40[b]
IPT	High	85%	Both	12 to 18	Puerto Rican; Hispanic; Caucasian	MA; PhD; MD	Weekly	12 weeks	Individual	Clinic	High	Low	1999	1.51[a,b]
Relaxation	High	100%	Both	11 to 18	Not Specified	MA; PhD	Twice per week	5 to 8 weeks	Group	School	Low	Low	1990	1.48[a,b]

Note. CBT = Cognitive Behavior Therapy; IPT = Interpersonal Therapy; "Train" = Trainability; Effect sizes reported are the median effect size across all relevant studies (a = Children's Depression Inventory; Kovacs, 1981; b = Beck Depression Inventory; Beck & Steer, 1987).

"Year" refers to the most recent study coded.

Table 7. Effective Interventions for Disruptive Behavior and Willful Misconduct Problems (Including Oppositional Defiant and Conduct Disorders)

Intervention	Train	Compliance	Gender	Age	Ethnicity	Therapist	Frequency	Duration	Format	Setting	Robustness	Cost	Year	Effect Size
Level 1														
Parent Training	High	96%	Both	3 to 15	Caucasian; African American; Hispanic American	Self; MA; PhD	Weekly	2 weeks to 6 months; most ~ 13 weeks	Self administered; Video; Parent Group; Parent Individual	Clinic; Home	High	Low	1994	0.89[a]
Level 2														
Anger Coping	High	*	Males only	9 to 15	Caucasian; African American	Not Specified; School Counselor	Weekly	7 to 18 weeks	Group	School	Moderate	Low	1984	0.55[b]
Assertive-ness Training	*	Not Specified	Males only	13 to 14	African American	Not Specified	2/week	4 weeks	Group	Clinic	Low	Low	1984	*
Functional Family Therapy	High	74%	Both	13 to 16	Not Specified	MA	Daily to Weekly	3 months	Family	Not Specified	Low	Low	1973	*
MST	Mod/ High	85%	Both	10 to 17	African American; Caucasian	MA	Daily to Weekly	3 to 5 months	Family	Home; School	Moderate	Moderate	1995	0.5[c]
Problem Solving Skills Training	High	85%	Both	7 to 13	Caucasian; African American	MA	2 to 3 times/week to weekly	7 weeks to 8 months	Individual	In-patient; Clinic	High	Moderate to Low	1992	1.59[d]
Rational Emotive Therapy	Mod	*	Both	15 to 17	African American; Hispanic	MA	Daily	12 Weeks	Group	Clinic	Low	Low	1978	3.07[e]

*Note. MST = Multisystemic Therapy; "Mod" = Moderate; "Train" = Trainability; "N/A" = not reported; Effect sizes reported are the median effect size across all relevant studies (a = Child Behavior Checklist-Total Problems Scale; Achenbach, 1991; b = Missouri Child Behavior Checklist-Aggression Subscale; Sines, 1986; c = Revised Behavior Problem Checklist; Quay & Peterson 1987, 1996; d = Child Behavior Checklist-Externalizing Scale; Achenbach, 1991; e = observations of disruptive classroom behavior). * Could not be estimated due to lack of information in published reports. "Year" refers to the most recent study coded.*

Table 9. Effective School-Based Programs

Intervention	Train	Compliance	Gender	Age	Ethnicity	Therapist	Frequency	Duration	Format	Setting	Robustness	Cost	Year	Effect Size
Level 2														
AC-SIT	High	*	Males Only	9 to 11	African American; Caucasian	N/A	Weekly	18 weeks	Group	School	Low	Low	1986	N/A
PATHS	High	*	Both	6 to 11	Caucasian; African American; Asian American	Teachers	Three times per week	20 weeks	Whole Classroom	School	Low	Low	1995	N/A
Fast Track	High	*	Both	1st gr.	African American; Caucasian; Hispanic, Pacific Islander	Teachers	Two to three times per week	8 months	Whole Classroom	School	Low	Low	1993	0.16[a]
Level 3														
Project ACHIEVE	High	*	N/A	1st to 3rd gr.	Caucasian; African American;	Teachers	Daily	3 years	Whole School	School	Low	Low	1995	N/A
Social Relations	High	*	Both	3rd gr.	African American	MA, Ph.D.	Twice per week	17 weeks	Individual and Group	School	Low	Low	1993	N/A

Note. "Mod" = Moderate; "Train" = Trainability; "N/A" = not reported; Effect sizes reported are the median effect size across all relevant studies * Could not be estimated due to lack of information in published reports. a = Achenbach Teacher Report Form, Externalizing Scale (Achenbach, 1991). "Year" refers to the most recent study coded.

Out of Home Services

Table 10. Effective Services Interventions

Intervention	Train	Compliance	Gender	Age	Ethnicity	Therapist	Frequency	Duration	Format	Setting	Robustness	Cost	Year	Effect Size
Level 2														
Multi-dimensional Treatment Foster Care	Mod	*	Both	9 to 18	Caucasian; African American; American Indian	Foster parents	Daily	9 months	Foster Care	Foster Home	Low	High	1998	0.73[a]
Level 3														
Wrap Around Foster Care	Mod	*	Both	7 to 15	Caucasian; African American	BA, MA, Foster parents	Daily	Variable, most under 18 months	Foster Care	Foster Home	Low	High	1998	0.50[b]

Note. "Mod" = Moderate; "Train" = Trainability; "N/A" = not reported; Effect sizes reported are the median effect size across all relevant studies. a = Elliot Behavior Checklist, General Delinquency Scale, Elliot et al., (1983); b = Achenbach Child Behavior Checklist, Externalizing Scale, Achenbach (1991). "Year" refers to the most recent study coded.

Section II:
Medication Review

Summary of Evidence in Pediatric Psychopharmacology

	Level of Supporting Data [a]			
		----------Efficacy----------		----------Safety----------
Category	Indication	Short-Term	Long-Term	Short-Term	Long-Term
Stimulants	ADHD	A	B	A	A
SSRIs	Major depression	A	C	B	C
	OCD	A	C	B	C
	Anxiety disorders	A	C	C	C
Central adrenergic agonists	Tourette's disorder	B	C	B	C
	ADHD	C	C	C	C
Valproate and carbamazepine	Bipolar disorders	C	C	A[b]	A[b]
	Aggressive conduct	C	C	A	A[b]
TCAs	Major depression	C	C	B	B
	ADHD	B	C	B	B
Benzodiazepines	Anxiety disorders	C	C	C	C
Antipsychotics	Childhood schizophrenia & psychoses	B	C	C	B
	Tourette's disorder	A	C	B	B
Atypical Antipsychotics	Aggression	A	C	A	C
Lithium	Bipolar disorders	B	C	B	C
	Aggressive conduct	B	C	C	C

Note: SSRI = selective serotonin reuptake inhibitor; TCA = tricyclic antidepressant; ADHD = attention-deficit hyperactivity disorder; OCD = obsessive-compulsive disorder.

[a] A = adequate data to inform prescribing practices; for efficacy and short-term safety: ≥ 2 randomized controlled trials (RCTs) in youth; for long-term safety: epidemiological evidence and/or minimal adverse incident report to the Food and Drug Administration. B = for efficacy and short-term safety: 1 RCT in youth or mixed results from ≥ RCTs. C = no controlled evidence.

[b] Safety data based on studies of children with seizure disorder.

The table above is adapted and updated with permission from Jensen et al. (1999), Psychoactive Medication Prescribing Practices for U.S. Children: Gaps Between Research and Clinical Practice, *Journal of the American Academy of Child and Adolescent Psychiatry, 38*: 557-565.

Section III: Consensus Summaries

- Suicidal and Related Behaviors
- Seclusion and Restraint
- Neuropsychological Assessment
- Reactive Attachment Disorder
- Plethysmographic Assessment

Trading in the Sextant for GPS:

Precision Understanding of Evidence Based Practices

Practice Development Approaches

- Bring in known programs
- Develop current standard of care in line with evidence based strategies
- Blended

Defining Common Elements of Evidence Based Practice

- Review of intervention content
- Common elements identified
- Yields profiles of promising strategies

From Chorpita, Daleiden, & Weisz, 2003; CAMHD, 2003

Goal

- Bring together evidence-based ideals with the need for individualized, comprehensive, and family-friendly services for youth

Some Concerns Regarding EBS

- Fixed content
- Fixed intensity
- Fixed length
- Single target approach
- Empty cell problem
- Crowded cell problem

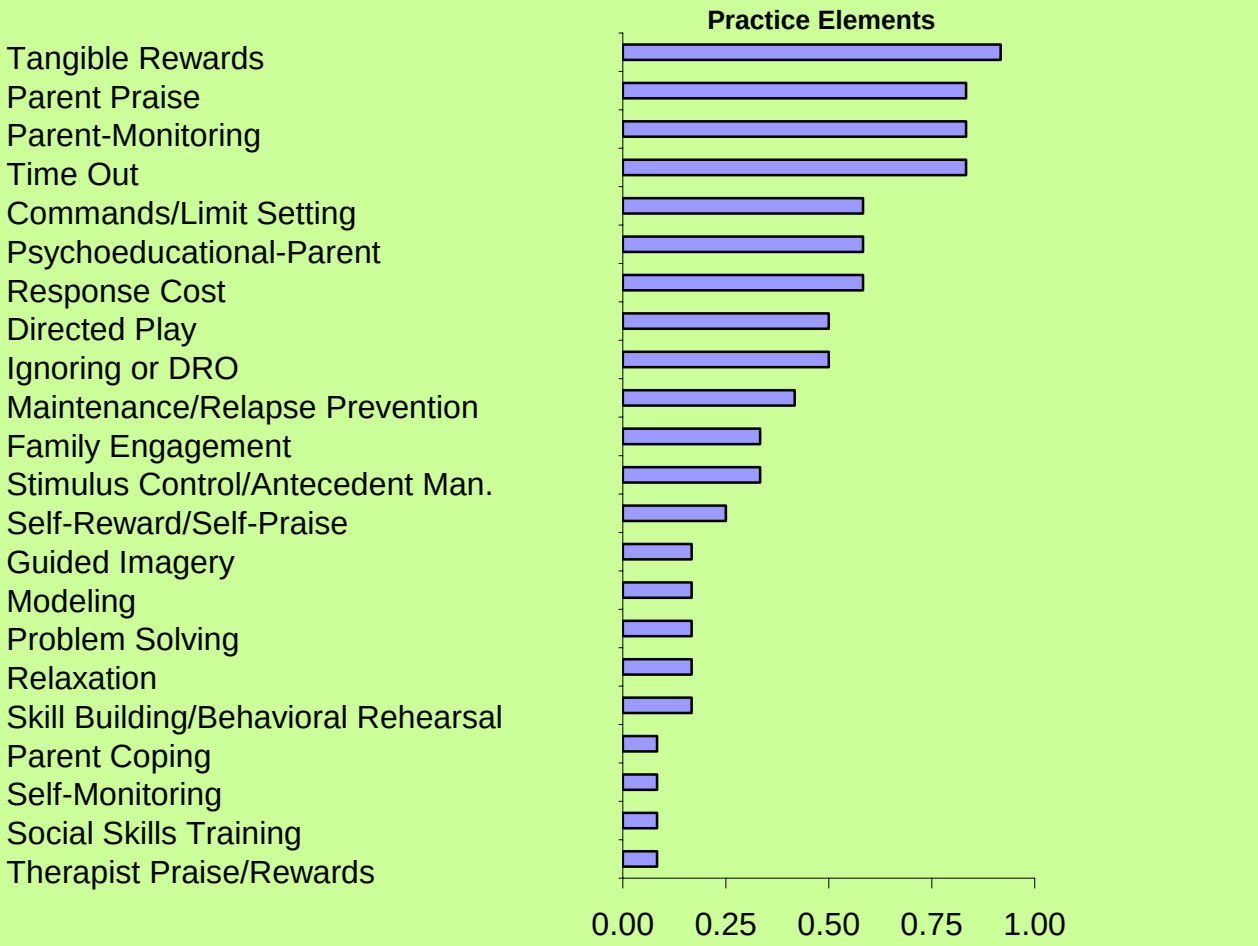
Interventions and Elements

- Interventions are multifaceted services with many techniques and strategies
- Each technique or strategy can be identified as a **practice element**
- These elements are the building blocks of interventions

Hawaii Evidence-Based Services Practice Profile (as of 11/5/2004)

EBS Level 1 Best Support

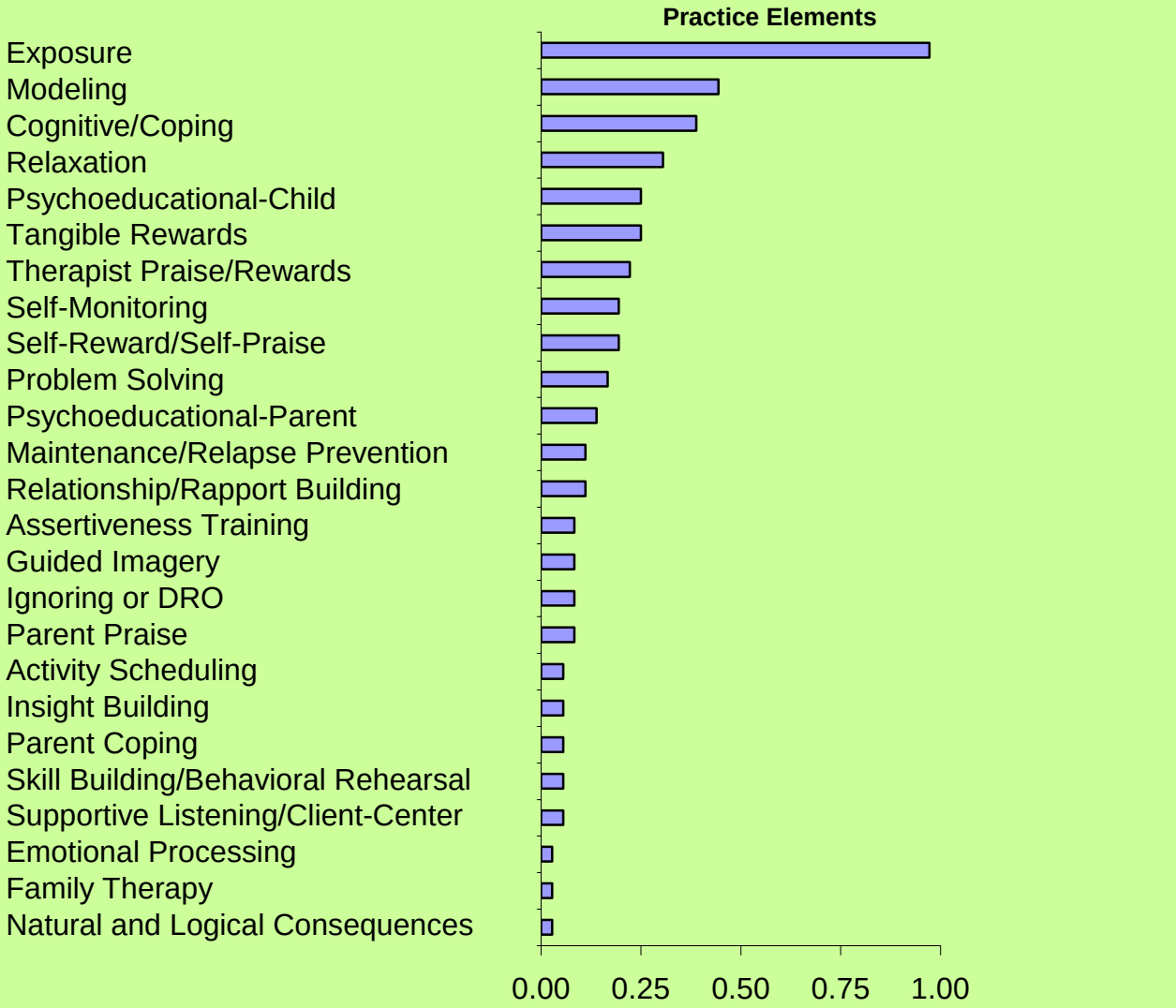
Problem(s): 100% Attention & Hyperactivity



Hawaii Evidence-Based Services Practice Profile (as of 11/5/2004)

EBS Level 2 Good Support or Better

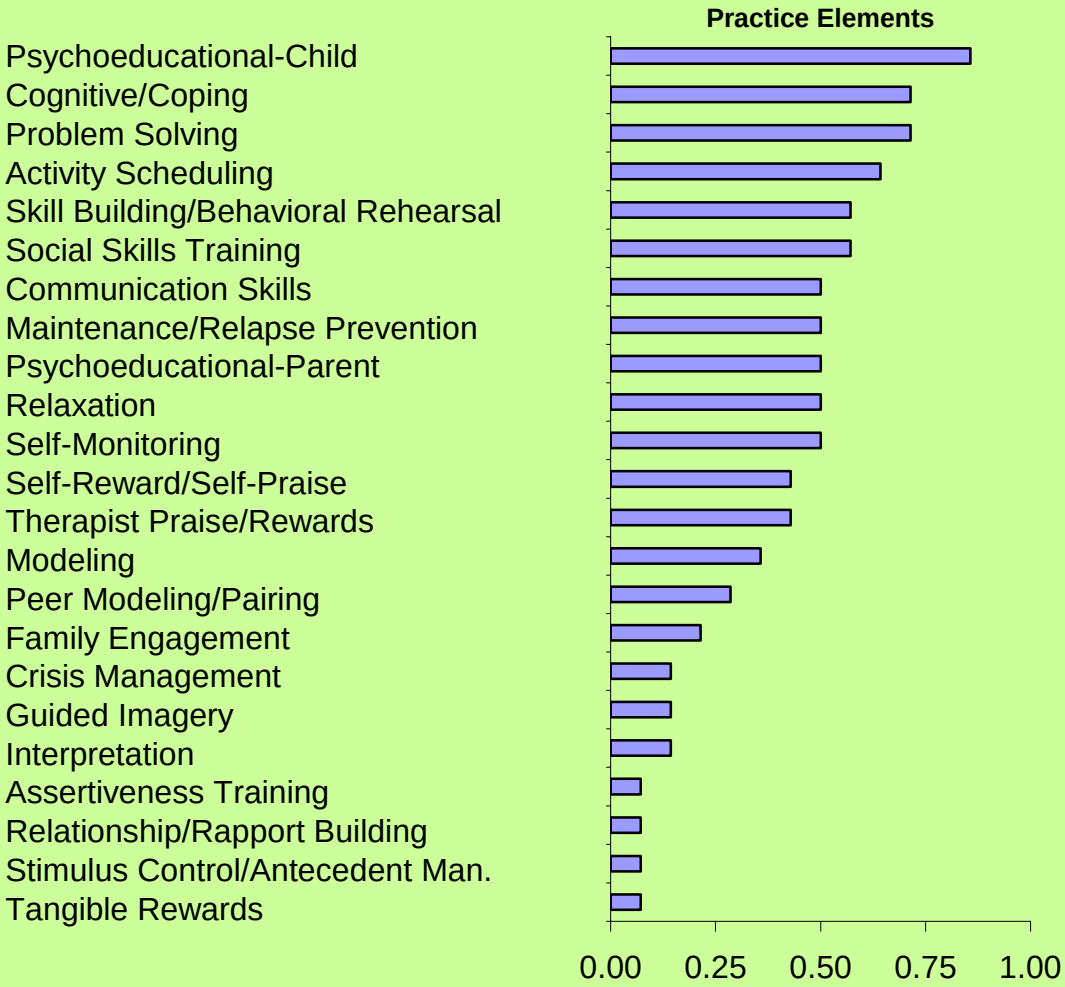
Problem(s): 100% Anxious/Avoidant



Hawaii Evidence-Based Services Practice Profile (as of 11/5/2004)

EBS Level 2 Good Support or Better

Problem(s): 100% Depressive or Withdrawn



Hawaii Evidence-Based Services Practice Profile (as of 11/5/2004)

EBS Level 2 Good Support or Better

Problem(s): 100% Disruptive or Oppositional, 3% Delinquency and Willful Misconduct

Results as a Guidepost

- Can point to a single, fully elaborated intervention
- Can point to choice of multiple promising interventions
- Can profile across areas for which there are no promising interventions
- Need not deconstruct promising interventions – can also point to them

Advantages

- Ranks relative frequency of elements
  - Leads to empirically informed, individualized interventions
  - Potentially more efficient assembly
  - Avoid shotgun approaches

Advantages

- Training Efficiency
  - Number of practice elements should grow less rapidly relative to overall knowledge base

Advantages

- Supports youth with multiple targets
- Summation of practice elements
  - Allows for evidence-based provision of services to more than just “pure” cases

Advantages

- Flexible matching of interventions to youth
  - Families can better participate in intervention planning
  - Helps inform revisions to plan

Advantages

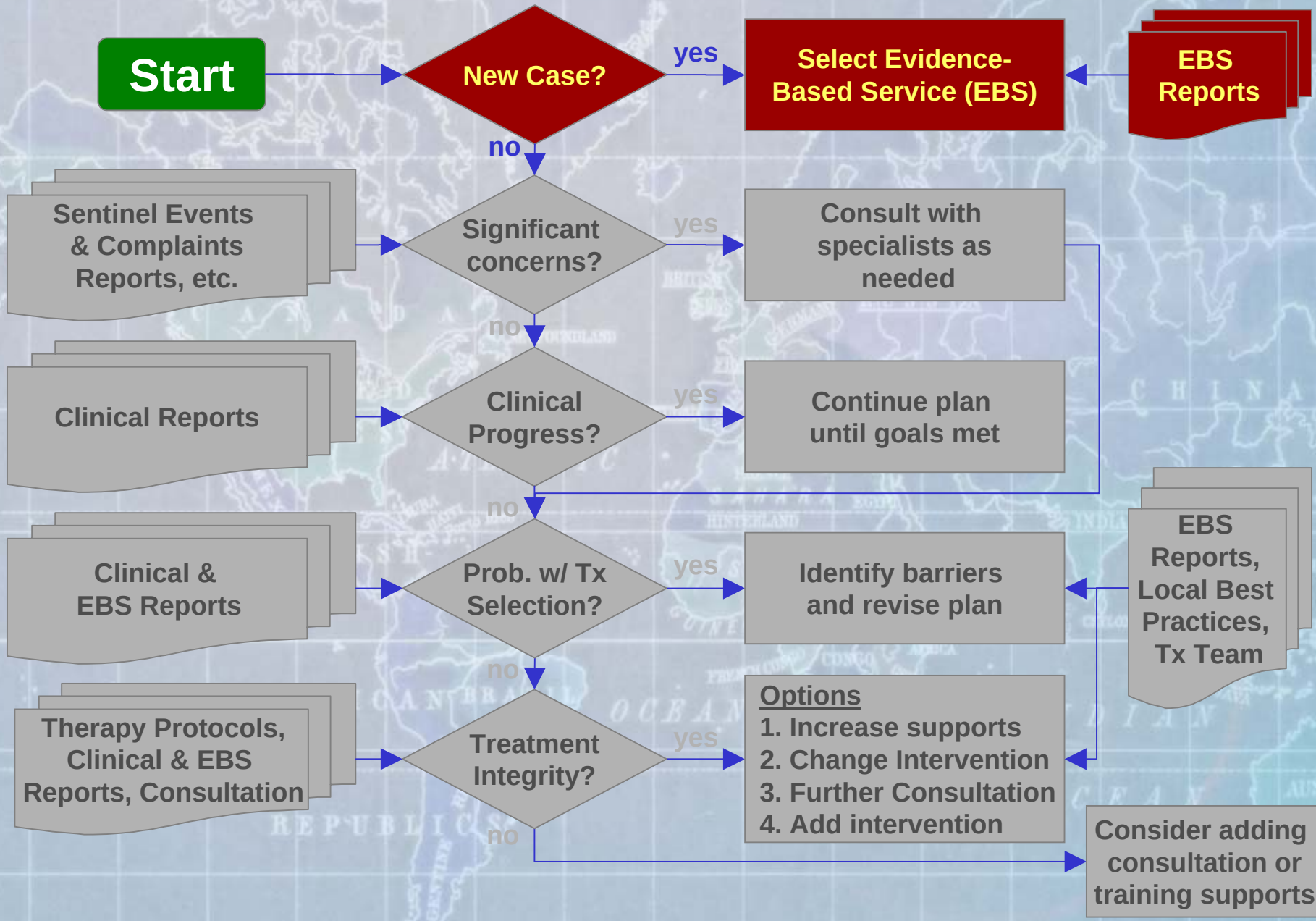
- Handles problem of duplicate evidence
  - Averages across interventions that have equivalent evidence for addressing a target in a given context
  - Gives weighted consideration to all effective approaches

Advantages

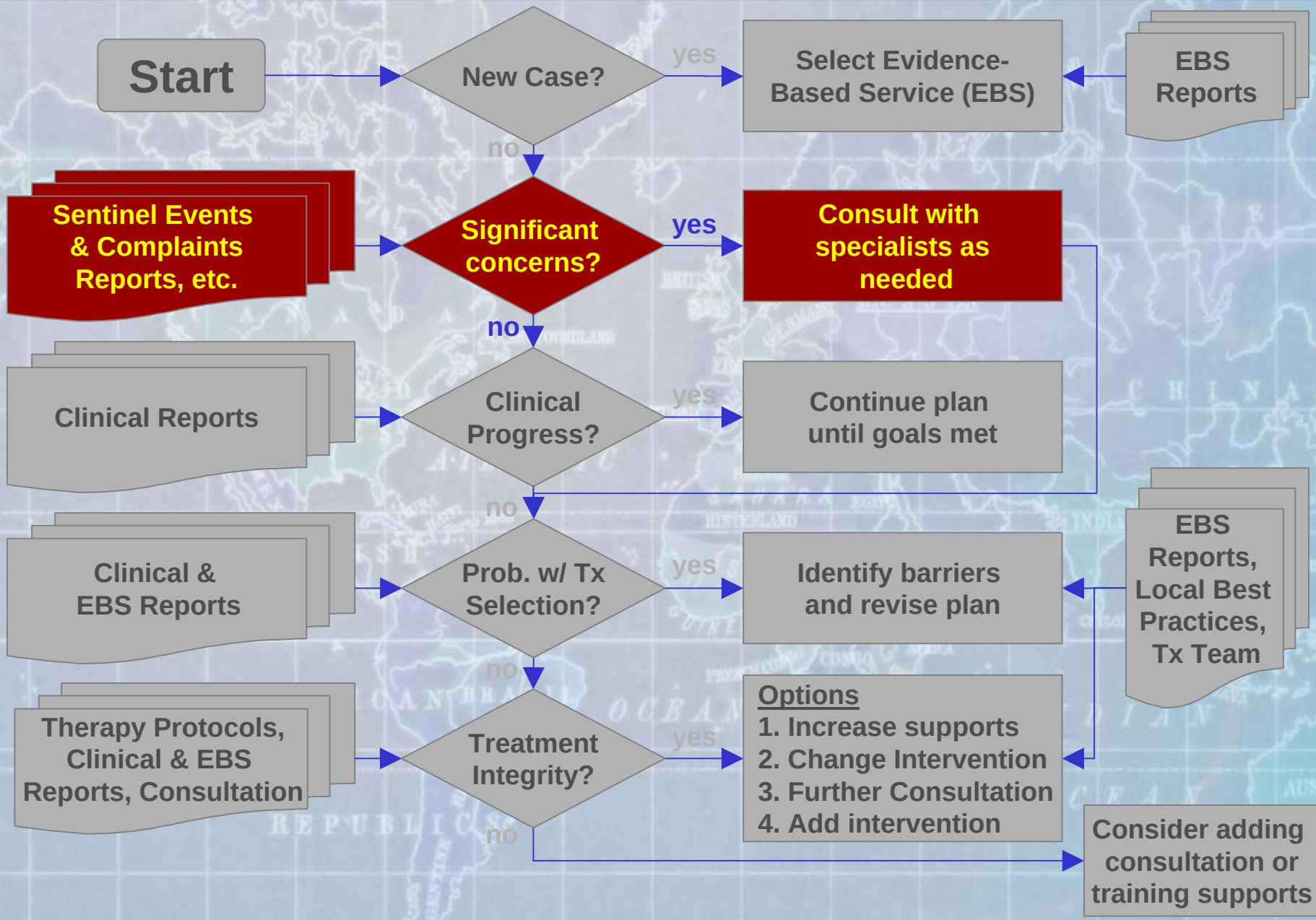
- Handles problem of no evidence
  - Averages across broad classes of targets to leave fewer areas for which there are no informed options
  - Leaves fewer families and youth behind
    (e.g., obsessive compulsive disorder, bulimia)

Mapping the Course and Reading Your Instruments

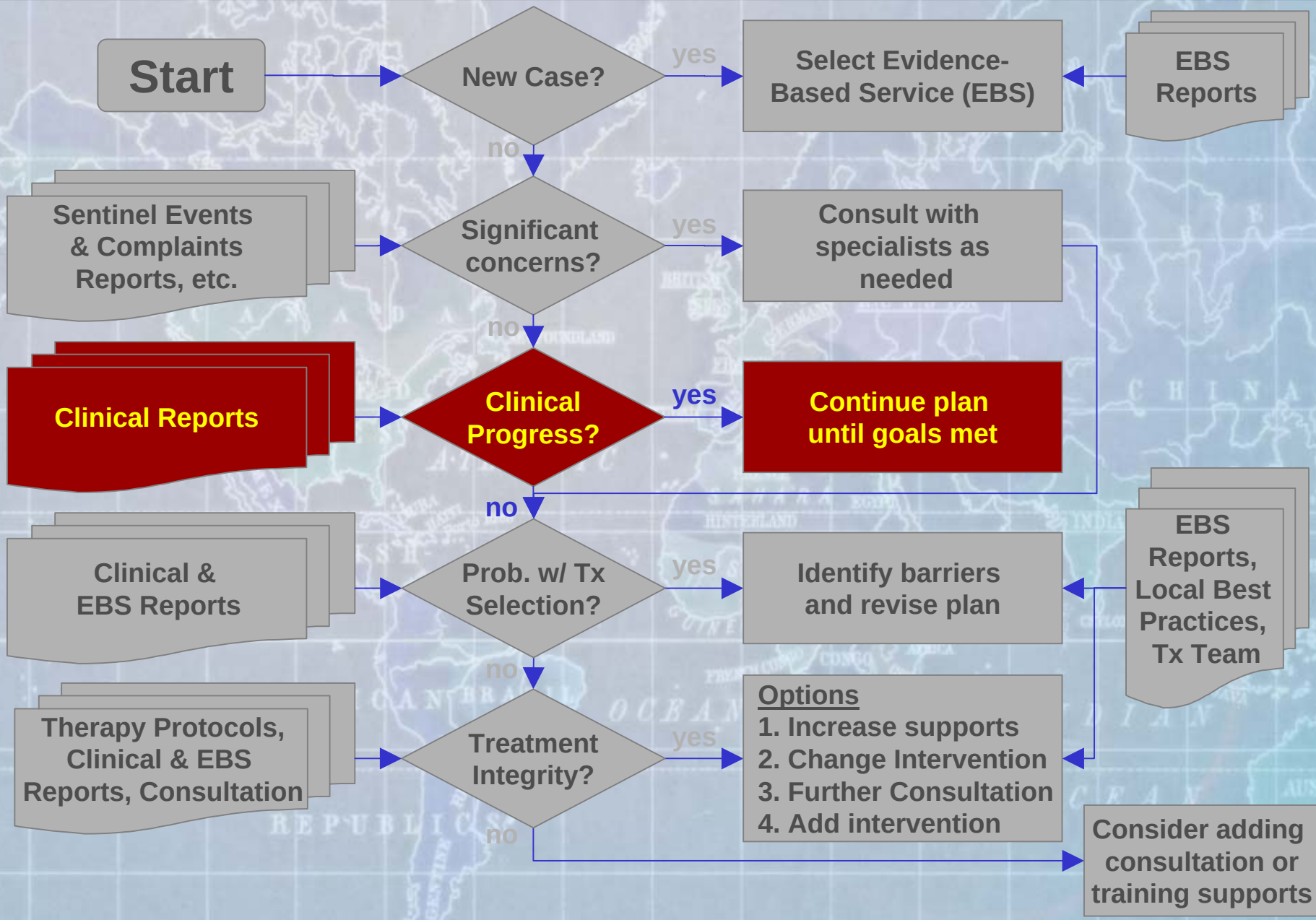
Evidence-Based Clinical Decision-Making



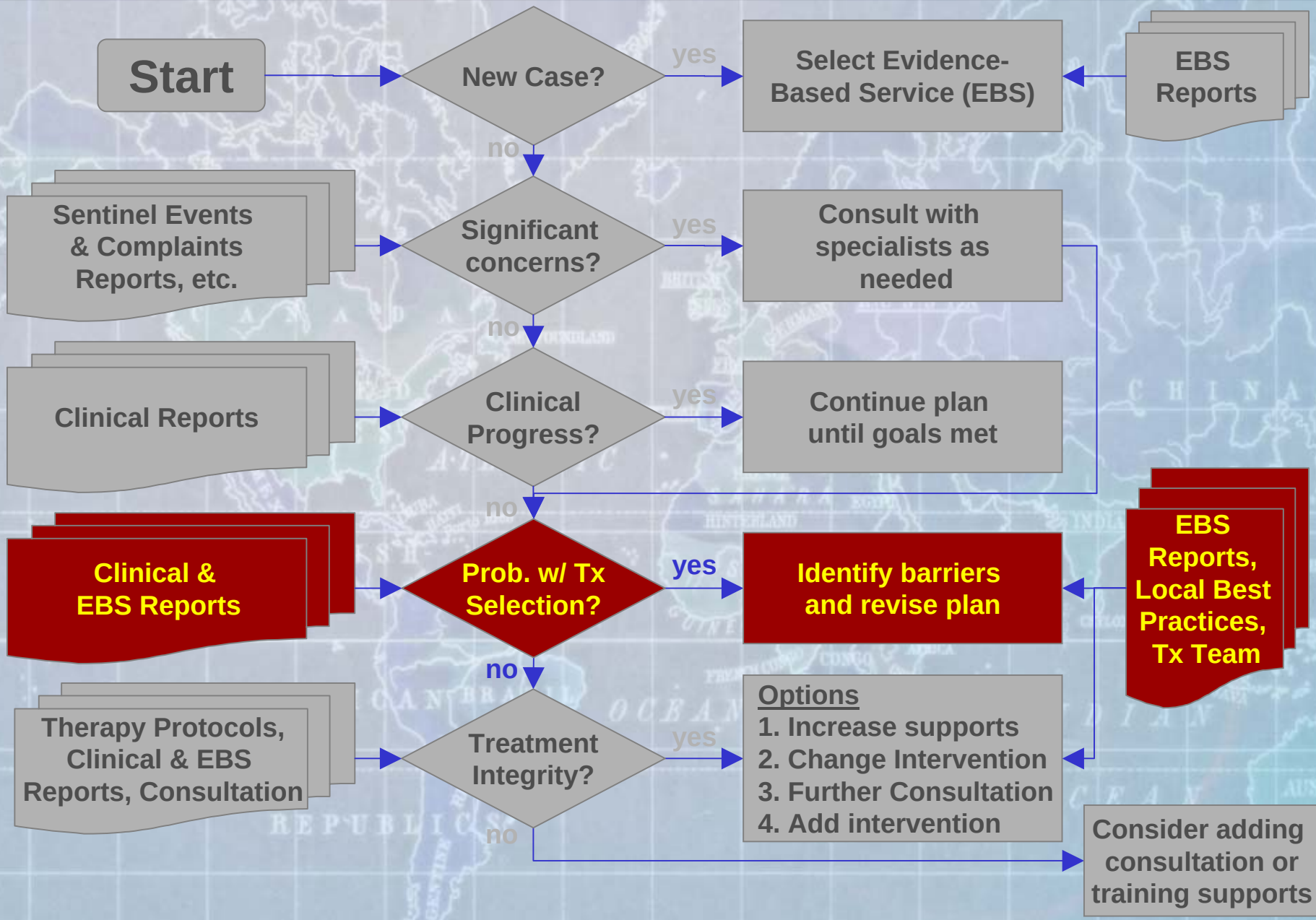
Evidence-Based Clinical Decision-Making



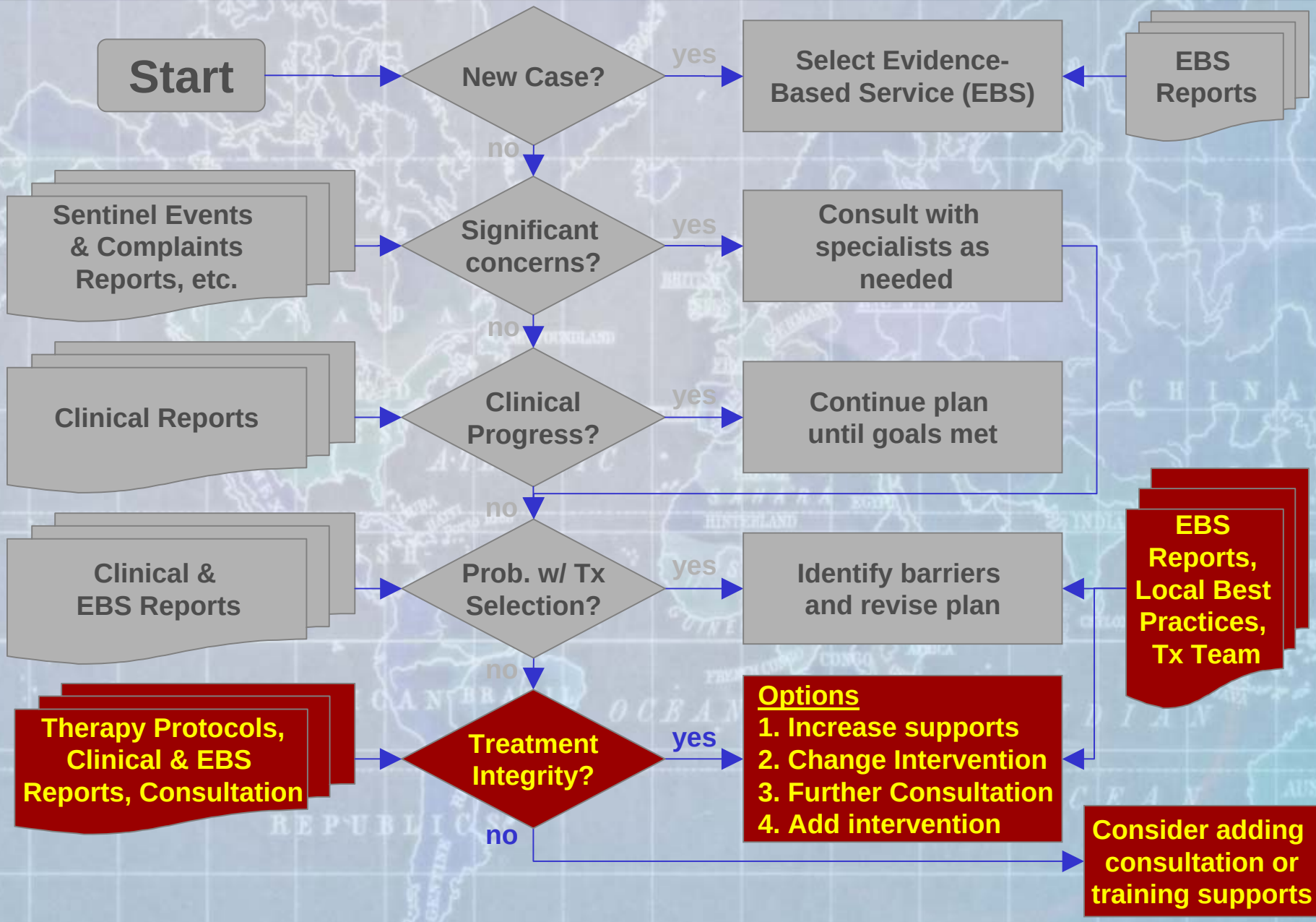
Evidence-Based Clinical Decision-Making



Evidence-Based Clinical Decision-Making



Evidence-Based Clinical Decision-Making



Crewing the Vessel

Evaluation of EBS

1. How is our measurement?
2. Do the services fit our problems?
3. How evidence-based is actual care?

How is Our Measurement?

1. Youth Problems

    Diagnoses

    Treatment Targets

2. Therapeutic Practices

Diagnostic Stability

Problem Area	κ	Interpretation
Anxiety and Avoidant	.54	Fair
Attention and Hyperactivity	.49	Fair
Bipolar Disorder	.31	Poor
Depressed and Withdrawn	.42	Fair
Disruptive Behavior	.32	Poor
Psychotic/Schizophrenic	.61	Good
Substance-Related	.65	Good

Monthly Treatment & Progress Summary: MTPS Target Stability

Interpretation	N	%
Excellent	11	17%
Good	32	50%
Fair	9	14%
Poor	9	14%
Insufficient Data	3	5%

MTPS Practice Stability

Interpretation	N	%
Excellent	15	11%
Good	40	55%
Fair	11	15%
Poor	4	5%
Insufficient Data	3	4%

MTPS Validity: Convergent Targets & Diagnoses

More Likely Targets

Diagnostic Group	
Anxiety & Avoidant	Attention & Hyperactivity
Anxiety	Attention Problems
Shyness	Hyperactivity
Traumatic Stress	Learning Disorder/ Underachievement
Personal Hygiene	

MTPS Validity: Convergent Targets & Diagnoses

More Likely Targets

Diagnostic Group	
Depressed & Withdrawn	Disruptive Behavior
Depressed Mood	Anger
Suicidality	Aggression
Positive Family Functioning	Oppositional/ Non-Compliant
School Attendance/ Truancy	Willful Misconduct/ Delinquency
	Substance Use

Do the services fit our problems?

1. Diagnoses

33% had pure diagnosis with EBS

89% had primary diagnosis with EBS

70% had EBS for all diagnoses

Do the services fit our problems?

2. Treatment Targets

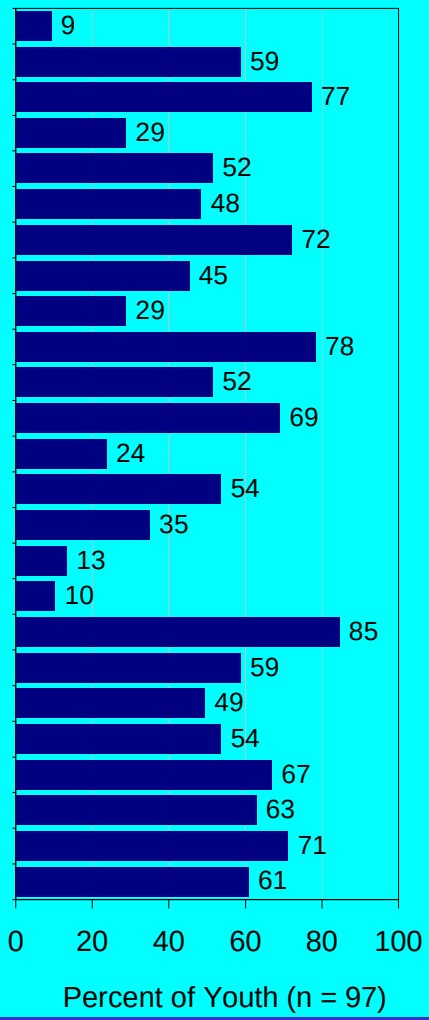
90% had EBS for one or more targets

3% had EBS for all targets

∴ 97% had one or more targets with with no EBS

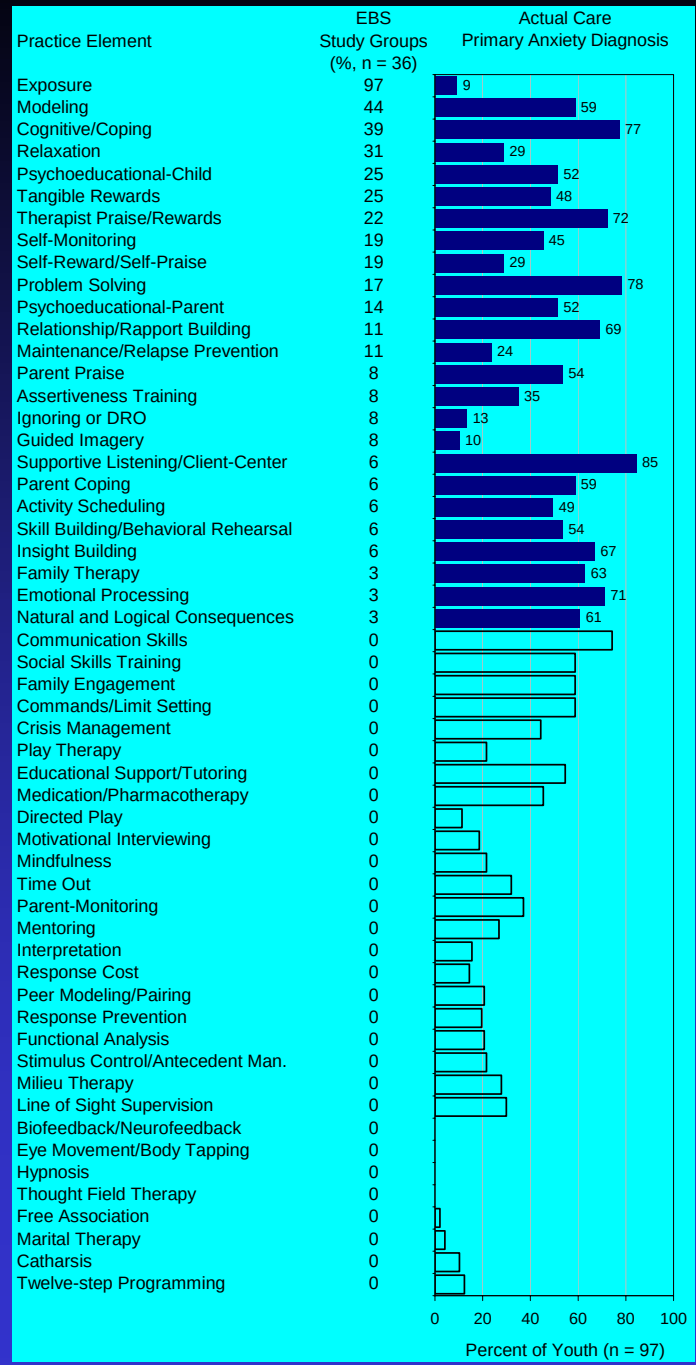
How evidence-based is actual care?

Practice Element	EBS Study Groups (%, n = 36)	Actual Care Primary Anxiety Diagnosis
Exposure	97	9
Modeling	44	59
Cognitive/Coping	39	77
Relaxation	31	29
Psychoeducational-Child	25	52
Tangible Rewards	25	48
Therapist Praise/Rewards	22	72
Self-Monitoring	19	45
Self-Reward/Self-Praise	19	29
Problem Solving	17	78
Psychoeducational-Parent	14	52
Relationship/Rapport Building	11	69
Maintenance/Relapse Prevention	11	24
Parent Praise	8	54
Assertiveness Training	8	35
Ignoring or DRO	8	13
Guided Imagery	8	10
Supportive Listening/Client-Center	6	85
Parent Coping	6	59
Activity Scheduling	6	49
Skill Building/Behavioral Rehearsal	6	54
Insight Building	6	67
Family Therapy	3	63
Emotional Processing	3	71
Natural and Logical Consequences	3	61



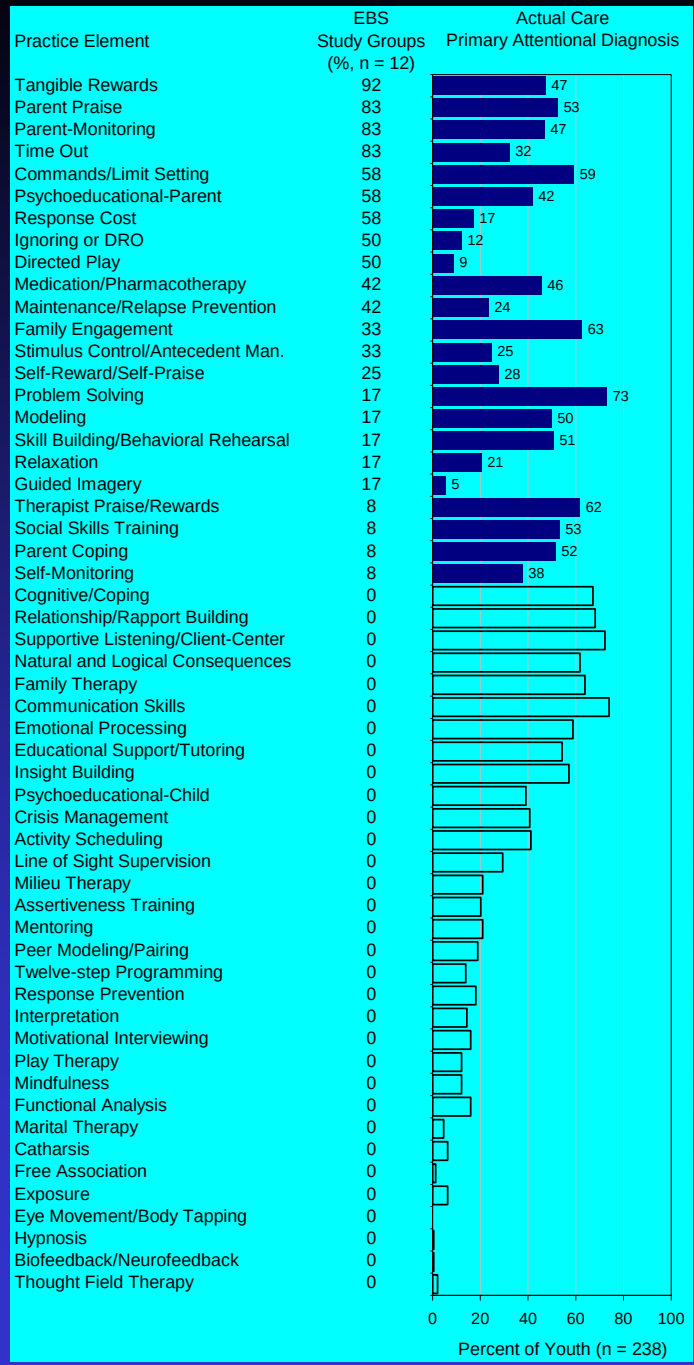
Primary Anxiety or Avoidant Disorders

	EBS Protocols	Actual Care
Practices (% of EBS)	18%	49%
Ave. Weight per Practice	51%	14%



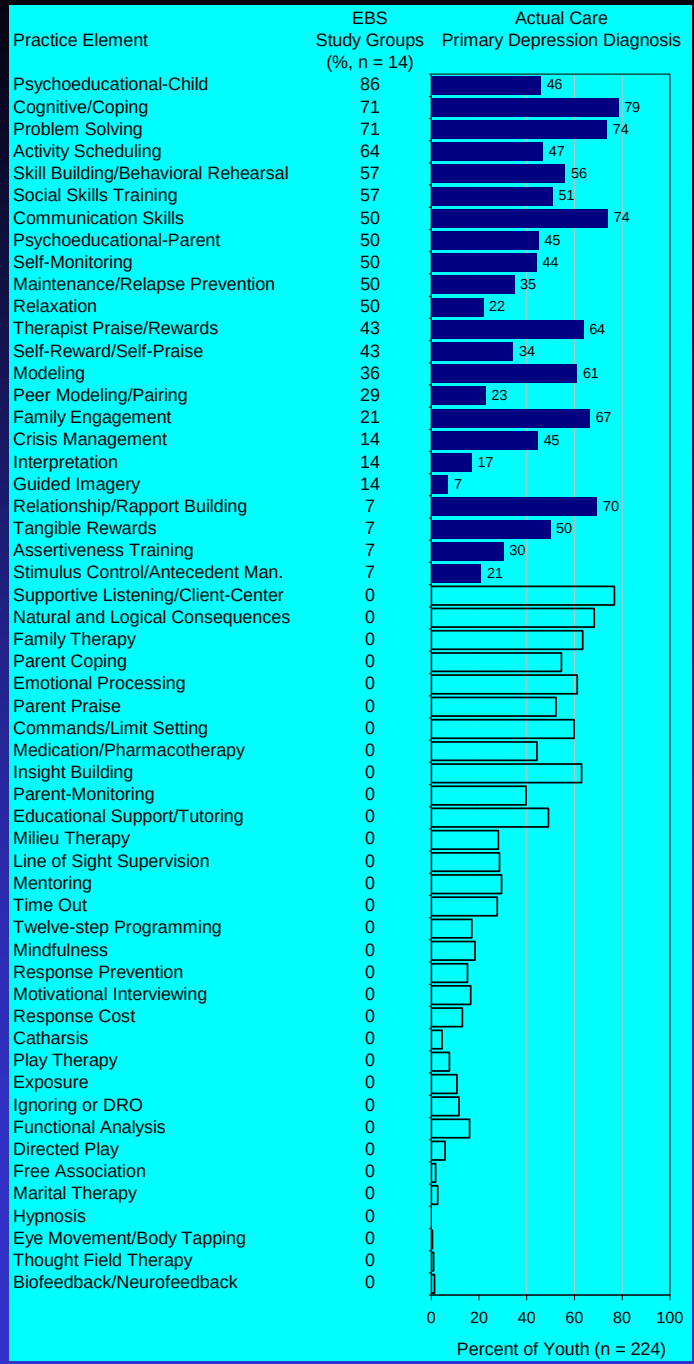
Primary Attention or Hyperactivity Disorders

	EBS Protocols	Actual Care
Practices (% of EBS)	39%	38%
Ave. Weight per Practice	66%	38%



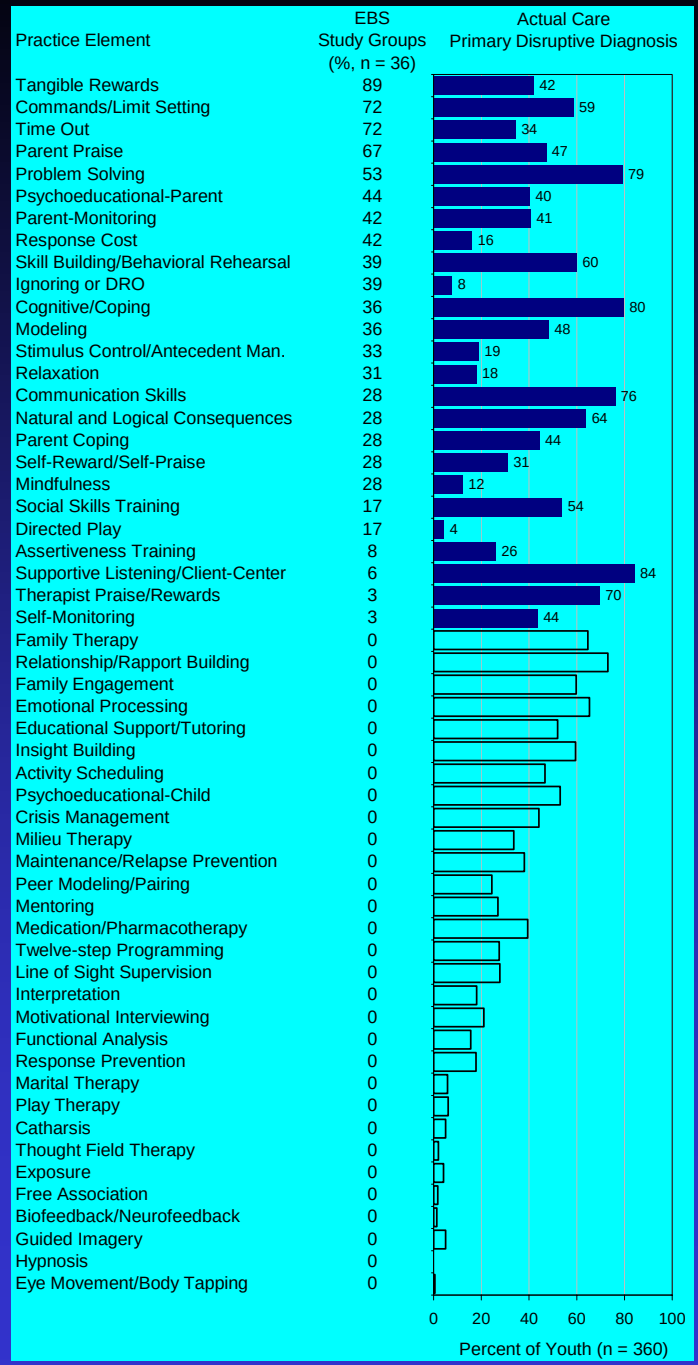
Primary Depressed or Withdrawn Disorders

	EBS Protocols	Actual Care
Practices (% of EBS)	39%	45%
Ave. Weight per Practice	54%	44%



Primary Disruptive Behavior Disorders

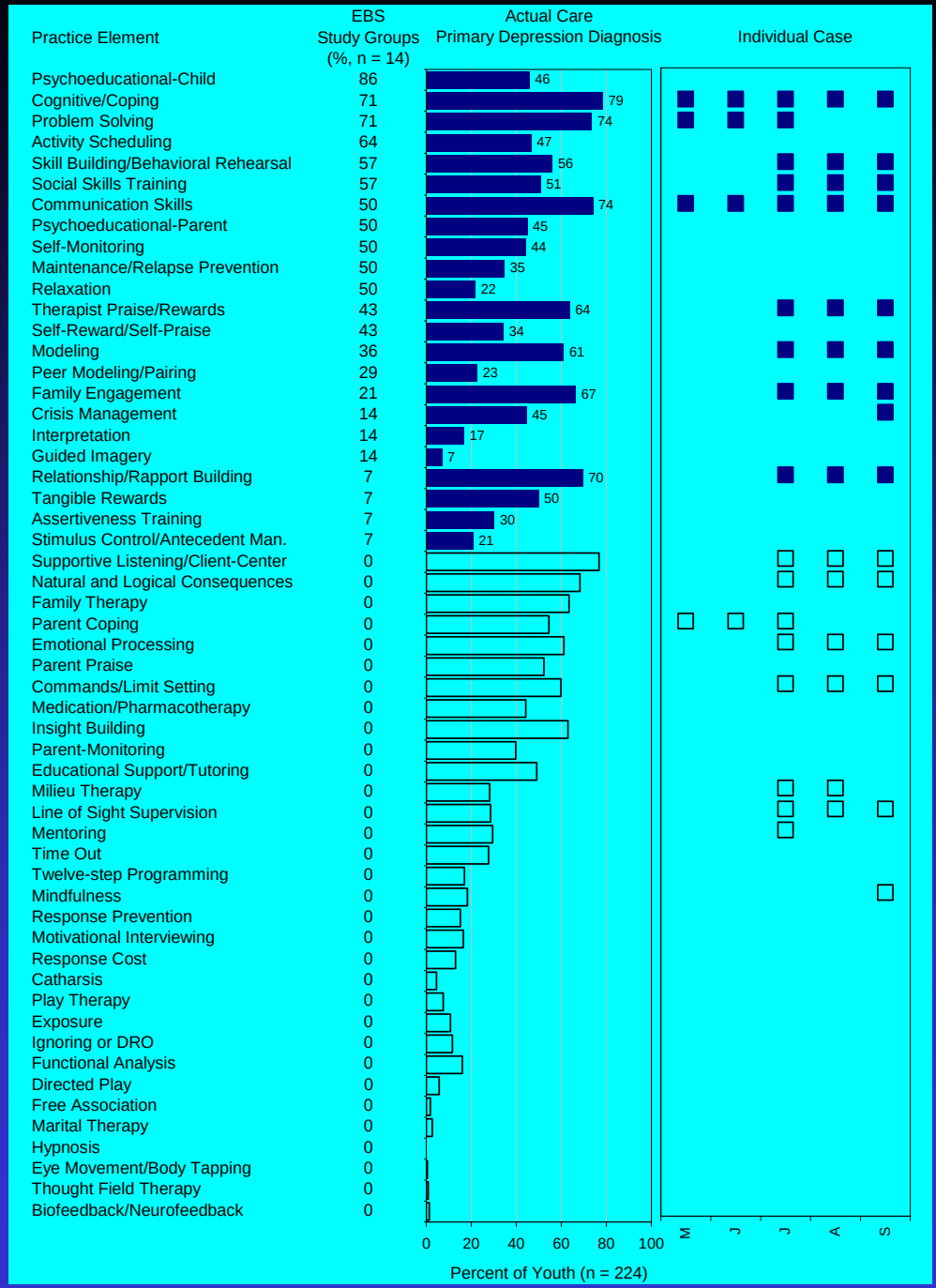
	EBS Protocols	Actual Care
Practices (% of EBS)	35%	45%
Ave. Weight per Practice	48%	34%



Individual Case Application

Provider Practice Report is available through the Clinical Reporting Module

Update is in Progress



Take Home Messages

How is our measurement?

Diagnoses are mediocre

Monthly Treatment and Progress Summary

- Generally good monthly stability
- Similar to diagnosis in 90-day stability

Support for validity of targets with diagnosis

Validity of practice elements unknown

Take Home Messages

Do services fit our problems?

EBS identified for the primary problems of the vast majority of CAMHD youth

Many youth have additional problem targeted for treatment without EBS identified yet

Problems still needing EBS:

adjustment disorder with mixed disturbances, reactive attachment disorder, learning/communication/academic disorders, intermittent explosive/impulse disorders

Take Home Messages

How evidence-based is actual care?

Typically both empirically supported and unsupported practices used in actual care

Actual care is generally less focused than empirically supported protocols

Actual care incorporates less frequently supported practices

So far we've…Read the Seas, Read the Winds, Read the Stars, Mapped the Course, Crewed the Vessel

Today…We Lead

Oh Captain, My Captain

You don’t need a weatherman to tell which way the wind blows.

- Bob Dylan